HUNTERIAN SOCIETY

TRANSACTIONS.

SESSION 1899-1900.

TRANSACTIONS

OF THE

HUNTERIAN SOCIETY,

1899-1900.

HEADLEY BROTHERS,

PRINTERS,

LONDON AND ASHFORD, KENT.

THE

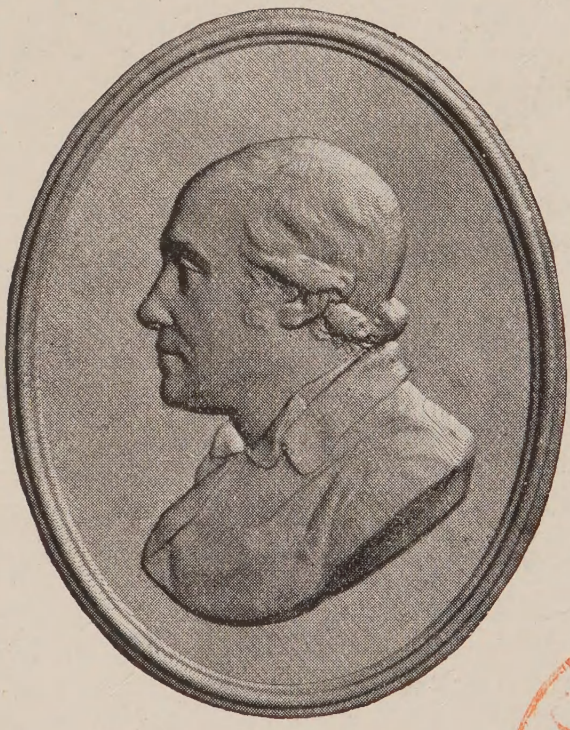
TRANSACTIONS

OF THE

HUNTERIAN SOCIETY.

1899-1900.

EIGHTY-FIRST SESSION.



Ratio Societatis Vinculum.

LONDON:

HEADLEY BROTHERS, 14, BISHOPSGATE WITHOUT, E.C

AND ASHFORD, KENT.

1901.

CONTENTS.

Hunterian Society Lectures.

Papers read before the Society.

Clinical Cases Described.

Pathological Specimens Shown.

PRESIDENTS OF THE SOCIETY

FROM ITS INSTITUTION.

1819 Sir William Blizard, F.R.S.
1822 Benjamin Robinson, M.D.
1824 William Babington, M.D., F.R.S.
1826 Benjamin Travers, F.R.S.
1828 Archibald Billing, M.D., F.R.S.
1830 Thomas Callaway.
1832 Charles Aston Key.
1834 Benjamin Guy Babington, M.D., F.R.S.
1836 Bransby Blake Cooper, F.R.S.
1838 John Whiting, M.D.
1839 John Scott.
1841 William Cooke, M.D.
1843 James Luke.
1845 Richard Bright, M.D., F.R.S.
1847 G. W. Macmurdo, F.R.S.
1848 Francis Henry Ramsbotham, M.D.
1849 Edward Cock.
1850 H. Marshall Hughes, M.D.
1851 John Adams.
1852 Henry Greenwood, M.D.
1853 John Hilton, F.R.S.
1854 John C. Weaver Lever, M.D.
1855 Thomas Blizard Curling, F.R.S.
1856 George Hilary Barlow, M.D.
1857 Samuel Solly, F.R.S.
1858 William J. Little, M.D.
1859 D. Henry Walne. [F.R.S.
1860 Sir James Risdon Bennett, M.D.,
1861 George Critchett.
1863 Thomas Mee Dalby, M.D.
1865 Alfred Smee, F.R.S.
1866 Stephen Henry Ward, M.D.
1867 John Jackson.
1868 Thomas Bevill Peacock, M.D.
1869 Jonathan Hutchinson, F.R.S.
1871 Dennis De Berdt Hovell.
1872 Herbert Davies, M.D.
1873 Thomas Bryant, M.Ch.
1874 Robert Barnes, M.D.
1875 William Sedgwick Saunders, M.D.
1876 Henry Isaac Fotherby, M.D.
1877 Arthur Edward Durham.
1878 Thomas Boor Crosby, M.D.
1879 John Braxton Hicks, M.D., F.R.S.
1880 John Couper.
1881 Peter Lodwick Burchell, M.D.
1882 John Hughlings Jackson, M.D., F.R.S.
1883 Walter Rivington, M.S.
1884 Robert Fowler, M.D.
1885 Philip Henry Pye-Smith, M.D., F.R.S.
1886 Francis Mead Corner.
1887 Henry Gervis, M.D.
1888 R. Clement Lucas, B.S., M.B.
1890 Stephen Mackenzie, M.D.
1892 Frederick Gordon Brown.
1894 Charters J. Symonds, M.S., M.D.
1896 G. Ernest Herman, M.B.
1898 John S. E. Cotman.

ORATORS, 1826-1901.

1826 Sir William Blizard, F.R.S.
1827 William Babington, M.D., F.R.S.
1828 Benjamin Robinson, M.D.
1829 Benjamin Travers, F.R.S.
1830 John Tricker Conquest, M.D.
1831 Charles Aston Key.
1832 Archibald Billing, M.D., F.R.S.
1836 Bransby Blake Cooper, F.R.S.
1837 Benjamin Guy Babington, M.D., F.R.S.
1838 William Coulson.
1839 William Cooke, M.D.
1840 Thomas Bell, F.R.S.
1841 Samuel Ashwell, M.D.
1842 Samuel Solly, F.R.S.
1843 Francis Henry Ramsbotham, M.D.
1844 John Hilton, F.R.S.
1845 John Thomson, M.D.
1846 John Adams.
1847 George Hilaro Barlow, M.D.
1848 Thomas Blizard Curling, F.R.S.
1849 Sir James Risdon Bennett, M.D.
1850 George Critchett.
1851 John Charles Weaver Lever, M.D.
1852 William James Little, M.D.
1853 Thomas Mee Daldy, M.D.
1854 George Owen Rees, M.D., F.R.S.
1855 Joseph Ridge, M.D.
1856 Thomas Callaway, Jun.
1857 Henry Oldham, M.D.
1858 William Munk, M.D.
1859 Alfred Smee, F.R.S.
1860 Stephen Henry Ward, M.D.
1861 Sir William Withey Gull, Bart., M.D., F.R.S.
1862 Thomas Bevill Peacock, M.D.
1863 Robert Barnes, M.D.
1864 John Jackson.
1865 Jonathan Hutchinson, F.R.S.
1866 Dennis de Berdt Hovell.
1867 William Sedgwick Saunders, M.D.
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1871 Thomas Boor Crosby, M.D.
1872 John Hughlings Jackson, M.D., F.R.S.
1873 Arthur Edward Durham.
1874 John Couper.
1875 Henry Gervis, M.D.
1876 Henry Gawen Sutton, M.B.
1877 Walter Moxon, M.D.
1878 Peter Lodwick Burchell, M.B.
1879 Walter Rivington, M.S.
1880 Philip Henry Pye-Smith, M.D., F.R.S.
1881 Alfred Henry Smee.
1882 Robert Fowler, M.D.
1883 Edward Gillett Gilbert, M.D.
1884 Francis Charlewood Turner, M.D.
1885 James Edward Adams.
1886 Sir Andrew Clark, Bart., M.D., F.R.S.
1887 Alfred Lewis Galabin, M.D.
1888 Richard Clement Lucas, B.S.
1889 George Ernest Herman, M.B.
1890 Stephen Mackenzie, M.D.
1891 Fletcher Beach, M.B.
1892 Charters James Symonds, M.S.
1893 John Sell Edmund Cotman.
1894 James Dundas Grant, M.D.
1895 Patrick Manson, M.D.
1896 George Newton Pitt, M.D.
1897 Richard Hingston Fox, M.D.
1898 Peter Horrocks, M.D.
1899 Sir Hugh Reeve Beevor, Bart., M.D.
1900 Frederick John Smith, M.D.
1901 John Poland.

LIST OF OFFICERS, 1900-1901.

President.

J. Dundas Grant, M.D.

Vice--Presidents.

G. Newton Pitt, M.D.
Hope Grant.
Arthur T. Davies, M.D.
Sir Hugh R. Beevor, Bart, M.D.

Treasurer.

R. Hingston Fox, M.D.

Trustees.

H. I. Fotherby, M.D.
F. M. Corner.

Hon. Librarian.

T. H. Arnold Chaplin, M.D.

Orator.

John Poland.

Secretaries.

J. H. Targett, M.S.
T. Glover Lyon, M.D.

Council.

J. S. E. Cotman.
W. A. Dingle, M.D.
Fortescue Fox, M.D.
E. W. Goodall, M.D.
A. Butler Harris, M.B.
J. W. Oliver, M.D.
W. Rawes, M.D.
F. J. Smith, M.D.
J. H. Sequeira, M.D.
T. G. Stevens, M.D.
W. H. Kelson, M.D.

Auditors.

F. Gordon Brown.
Hope Grant.
S. H. Appleford, M.D.
W. Rawes, M.D.

HONORARY FELLOWS.

LORD LISTER, D.C.L., LL.D., F.R.S., *12, Park Crescent, Portland Place, W.*

CHARLES STEWART, LL.D., F.R.S., Professor of Comparative Anatomy, and Physiology, and Conservator of the Hunterian Museum, *Royal College of Surgeons, London, W.C.*

JOHN YOUNG, M.D., Professor of Zoology, and Keeper of the Hunterian Museum, *The University, Glasgow.*

FOREIGN HONORARY FELLOWS.

JOHN S. BILLINGS, M.D., Brevet Lieut.-Col. and Surgeon, U.S. Army; Librarian, Surgeon-General's Office, Washington.

SAMUEL GROSS, M.D., LL.D., Professor of Surgery in the Jefferson Medical College, Philadelphia.

RUDOLPH VIRCHOW, M.D., LL.D., Professor of Pathological Anatomy in the University of Berlin.

LIFE FELLOWS.

P., President; V.P., Vice-President; C., Member of Council; O., Orator; S., Secretary; T., Treasurer; L., Librarian; Aud., Auditor.

C.* This indicates that *more* than two years have been served on the Council.

A. By payment of twenty-five annual subscriptions, in accordance with Law LXII.

When Admitted.

1856 ALLINGHAM, WILLIAM, F.R.C.S. *25, Grosvenor Street, W.*; V.P. 1869-70, C.* 1861-2, S. 1865-6-7-8.

1854 BARNES, ROBERT, M.D. - *Bernersmede, Eastbourne*; P. 1874, V.P. 1864-5, O. 1863, C.* 1859-62.

1875 BEACH, FLETCHER, M.B. - *64, Welbeck Street, Cavendish Square, W., and Winchester House, Kingston Hill, Surrey*; V.P. 1888-9, O. 1890, C. 1878-9.

1860 BERRY, HENRY T. - - - *66, Pembridge Villas, Bayswater, W.*; V.P. 1874, C. 1871-2.

1865 BROWN, FREDERICK GORDON - *17, Finsbury Circus, E.C.*; P. 1892-3, V.P. 1881-2, C.* 1869-70, S. 1872-3-4-5-6, Aud. 1895, 1898-1901.

When Admitted.

1862 Bryant, Thomas, M.Ch., F.R.C.S., *65, Grosvenor Street, W.*; P. 1873, V.P. 1870-71, O. 1870, C.* 1866-7.

1858 Clapton, Edward, M.D., F.R.C.S., *41, Eltham Road, Lee, S.E.*; V.P. 1872, 3, & 5, C.* 1870-1, 74.

1858 Corner, Francis M., Trustee *Manor House, Poplar, E.*; P. 1886, V.P. 1868-9, 1880-1, C.* 1862, 1864.

1862 Couper, John, F.R.C.S. - *80, Grosvenor Street, W.*; P. 1880, V.P. 1873-4, O. 1874, C. 1867, 1881.

1854 Crosby, Thomas B., M.D., F.R.C.S., *19, Gordon Square, W.C.*, and *13, Fenchurch Street, E.C.*; P. 1878, V.P. 1866-7, O. 1871, C.* 1860-1.

1877 Forbes, Daniel M. - - *Lynton Holme, 32, Oakfield Road, West Croydon.*

1854 Fotherby, Henry I., M.D., Trustee, *Woodthorpe Cote, Wray Common, Reigate, Surrey*; P. 1876, V.P. 1868-9, O. 1869, C.* 1871-2, S.1857-8-9-60-1-2-3-4-5-6-7.

1875 Galabin, Alfred L., M.A., M.D., *49, Wimpole Street, W.*; V.P. 1883-4, O. 1886, C. 1878-9.

1877 Goodsall, David H., F.R.C.S., *17, Devonshire Place, Upper Wimpole Street, W.*

1875 Grant, Alexander, M.A., M.D., *370, Commercial Road East, E.*; C. 1882.

1863 Greenwood, James, M.D. - *48, Canonbury Square, Islington, N*; V.P. 1880-1, C.* 1873-4.

1862 Greenwood, Major, M.D. - *26, Queen's Road, Dalston, N.E.*; V.P. 1884-5, C.* 1872-3.

1862 Hicks, G. Borlase - - *149, Amhurst Road, Hackney, N.E.*; V.P. 1888-9-90, C. 1886-7.

1855 Hutchinson, Jonathan, F.R.C.S., LL.D., F.R.S., *15, Cavendish Square, W.*; P. 1869-70, V. P. 1863-4, O. 1865, C.* 1860, 1862.

1862 Jackson, J. Hughlings, M.D., LL.D.,F.R.S., *3, Manchester Square, W.*; P. 1882, V.P. 1870-1, O. 1872, C. 1866, 1883.

1860 Lichtenberg, Geo., M.D. - *47, Finsbury Square, E.C.*; V.P. 1878-9, C.* 1864-5.

1869 McCarthy, Jeremiah, M.A., M. B., F.R.C.S., *1, Cambridge Place, Victoria Road, Kensington, W.*; V.P. 1877-8, C.* 1874-5.

When Admitted.

1837 Oldham, Henry, M.D. - - [*4, Cavendish Place, W.*]

1864 Pettifer, Edmund H. - - *50, Southgate Road, N.*

1870 Pye-Smith, P. H., B.A., M.D., F.R.S., *48, Brook Street, W.*; P. 1885, V.P. 1879-80, O. 1879, C.* 1875-6.

1869 Smee, Alfred H. - - *The Grange, Hackbridge, Carshalton, Surrey*; V.P. 1889-90, O. 1881, C.* 1875-6.

1869 Tay, Waren, F.R.C.S. - - *4, Finsbury Square, E.C.*; V.P. 1882-3, C. 1876-9, S. 1873-4-5, Aud. 1885-90.

B. By purchase, in accordance with Law LXII.

1892 Beevor, Sir Hugh R., Bart., M.D., *17, Wimpole Street, W.*; V.P. 1900-1, C.* 1895-7, O. 1899.

1865 Brownfield, Matthew - *171, East India Road, E.*; V.P. 1882-3, C.* 1869-70.

1864 Clapton, William, F.R.C.S. - *27, Queen Street, Cheapside, E.C.*; V.P. 1885-6, C.* 1869-70.

1879 Davies, John, M.D. - - *87, Cambridge Gardens, W.*; C. 1889.

1885 Fox, R. Hingston, M.D., Treasurer, *23, Finsbury Square, E.C.*, and *20, Gordon Square, W.C.*; V.P. 1895-7, T. 1900-1, O. 1897, C.* 1889, S. 1890-1-2-3-4.

1863 Gervis, Henry, M.D. - - *The Towers, Hillingdon, Uxbridge*; P. 1887, V.P. 1875-6, O. 1875, C. 1867.

1876 Gilbert, Edward G., M.D. - *Tunbridge Wells*; V.P. 1889-90, O. 1881, C.* 1879-80, 83-86.

1875 Herman, Geo. Ernest, M.B., F.R.C.S., *20, Harley Street, W.*; P. 1896-7, V.P. 1887, O. 1888, C.* 1879-80, 98, S. 1881-2-3-4.

1883 Hovell, T. Mark - - *105, Harley Street, W.*; V.P. 1895-6, C.* 1887, 1889.

1863 Little, Louis S., B.A., F.R.C.S., *Bletchingley, Surrey*; C. 1868.

1874 Lucas, R. Clement, M.B., B.S., F.R.C.S., *50, Wimpole Street, W.*; P. 1888-9, V.P. 1883-4, O. 1887, C.* 1891-4, S. 1876-7-8-9-80-1-2, Aud. 1892-4.

1876 Mackenzie, Stephen, M.D. - *18, Cavendish Square, W.*; P. 1889-90-91, V.P. 1884-5, O. 1889, C. 1880-1, S. 1877-8-9.

When Admitted.

1881 POLAND, JOHN, F.R.C.S. - - *2, Mansfield St., Cavendish Sq., W.*; V.P. 1893-4, O. 1901, S. 1887-8-9-90-1-2.

1887 SMITH, FREDERICK JOHN, M.A., M.D., F.R.C.S., *138, Harley St., W.*; V.P. 1897-8, O. 1900, S. 1895-6, C.* 1890-1, 1899-1900-1.

1875 STEVENS, GEORGE J. B. - *1, Stoke Newington Green, N.*; V.P. 1887-8, C.* 1878-9, and 1896.

1857 WALLACE, RICHARD U., M.B. - *148, Stamford Hill, N.*; V.P. 1873-4-5, C. 1870.

1901 WORTH, CLAUD A., F.R.C.S. *138, Harley Street, W.*

1880 YARROW, GEO. E., M.D. - - *26, Duncan Terrace, Islington, N.*; C. 1893.

ORDINARY FELLOWS.

1898 ADAMS, CHARLES E., M.B., B.Sc., *West Lodge, Buckhurst Hill, Essex.*

1893 ADAMS, JOHN, F.R.C.S. - - *180, Aldersgate Street, E.C.*; C. 1898-9.

1896 AGAR, MORLEY F. - - - *76, Wimpole Street, W.*; and *Ponders End, N.*

1899 ANDREWS, H. RUSSELL, M.D.- *London Hospital, E.*

1884 APPLEFORD, STEPHEN H., M.D. *17, Finsbury Circus, E.C.*; V.P. 1897-8, C.* 1888-9, Aud. 1893-4, 1900-1.

1889 BARLOW, THOS. C. - - *88, Dalston Lane, N.E.*

1897 BARNARD, HAROLD L., M.S., F.R.C.S., *9, Upper Wimpole Street, W.*; C. 1900.

1899 BEALE, ALFRED GEORGE - - *71, Amhurst Road, Hackney, N.E.*

1899 BERNSTEIN, MATTHIAS M., M.B., *36, St. George's Road, West Hampstead, N.W.*

1893 BERRILL, ALFRED - - *Waveney House, High Road, South Woodford, N.E.*; C. 1898.

1897 BEST, WM. HARRIS. - - *"Trelyon," Ilford, Essex.*

1899 BIRD, HENRY - - - *235, Kingsland Road, N.E.*

1883 BROWN, T. LLOYD - - *6, Hyde Road, Hoxton, N.*; C.* 1889-90.

1901 BRYANT, JOHN HENRY, M.D., B.S., *4, St. Thomas's Street, S.E.*

When Admitted.

1897 Burgess, C. Venning - - *223, Great Dover Street, S.E.*

1896 Burrows, Chas. Wm. G. - *Weston House, 175, Long Lane, S.E.*

1896 Byrne, Benjamin - - *20, Stainsby Road, Poplar, E.*

1900 Carson, Herbert Wm., F.R.C.S., Eng., *55a, Welbeck Street, W.*

1892 Chaplin, T. H. Arnold, B.A., M.D., Librarian, *41, Finsbury Square, E.C.*; C. 1895, L. 1897 to 1901.

1900 Corner, Frank, - - *The Manor House, Poplar, E.*

1890 Corner, M. Cursham - - *113, Mile End Road, E.*

1882 Cotman, John Sell E. - *141, Minories, E.*; P. 1898-9, V.P. 1894-5, C.* 1887-8, 1900, O. 1892, Aud. 1890-1.

1900 Cotman, Harold Herbert - *6, Crescent, Minories, E.C.*

1889 Cressy, A. Z. Claydon - - *Hayesden, Wallington, Surrey.*

1896 Crosse, William H. - - *45, Dover Street, Piccadilly, W.*

1901 Currie, Andrew S., M.D. - *81, Queen's Road.*

1885 Davies, Arthur T., B.A., M.D., *23, Finsbury Square, E.C.*; V.P. 1896 & 1900, O. 1902, L. 1888 to 1895, S. 1897-8-9.

1893 Dawson, Bertrand E., M.D., B.Sc., *110, Harley Street, W.*; C. 1896, 8.

1892 Dingle, William A., M.D. - *46, Finsbury Square, E.C.*; C. 1900-1.

1896 Downes, J. Lockhart, M.B., C.M., *271, Romford Road, Forest Gate, E.*

1889 Dunn, Louis A., M.S., F.R.C.S., *The College, Guy's Hospital, S.E.*; C. 1895, 1897.

1892 Ettles, W. J. McCulloch, M.D., C.M., *141, Minories, E.*; C. 1896, 1901.

1899 Farebrother, Wm. Arthur *442, Hackney Road, N.E.*

1896 Fordham, John Wm. - - *78, Mile End Road, E.*, and *The Beeches, Chingford, N.E.*

1894 Fox, R. Fortescue, M.D. - *29, Weymouth Street, W., & Strathpeffer, N.B.*; C.* 1897-1901.

1897 Fulton, Henry, M.D. - *The Bungalow, Lee-on-the-Solent, Hants.*

1888 Galloway, A. Wilton, - - *79, New North Road, N.*; C. 1898, 1901.

1893 Godding, James - - - *69, East India Road, Poplar, E.*

1895 Goodall, Edward W., M.D., B.S., *Eastern Hospital, Homerton, N.E.*; C. 1899-1901.

When Admitted.

1891 GRANT, HOPE - - - *15, Christopher Street, Finsbury Square, E.C.;* V.P., 1899-1900, C.* 1894-5-7-8, Aud. 1898-1901.

1878 GRANT, J. DUNDAS, M.A., M.D., C.M., F.R.C.S., President, *18, Cavendish Square, W.;* V.P. 1892-3, O. 1893, C.* 1885, 1888, Aud. 1891.

1887 GRANT, LEONARD, M.D., C.M., *Hillside, Station Road, New Southgate, N.*

1901 GRANT, C. GRAHAM - - *Albert Square, (523), Commercial Road, E.,* and *1, Old Serjeant's Inn, W.C.*

1893 GROGONO, WALTER A. - - *Berwick House, Broadway, and 216, High Street, Stratford, E.;* C. 1898.

1899 HAIR, ALLAN - - - *14, Upper Park Road, Hampstead, N.W.*

1896 HARRIS, A. BUTLER, M.A., M.B., B.Ch., *The Shrubbery, Loughton, Essex;* C. 1900.

1894 HASLETT, W. J. HANDFIELD - *Halliford House Asylum, Sunbury-on-Thames.*

1888 HEWER, J. LANGTON, M.D., B.S., F.R.C.S., *33, Highbury New Park, N.;* C. 1891-2.

1897 HICKMAN, HERBERT V., M.B. *Overton House, The Mall, Wanstead, N.E.*

1896 HILL, JAMES WRIGHT, M.B., C.M., *Ardlui, North Woolwich, E.*

1892 HIRSCH, CHAS. T. W. - - *Charlinch, Rectory Place, Woolwich.*

1899 HOOLE, HENRY, M.D. - - *Shirley House, Throgmorton Avenue, E.C.,* and *Sandrock, Well Road, Hampstead, N.W.*

1883 HORROCKS, PETER, M.D. - *42, Brook Street, Grosvenor Square, W.;* V.P. 1894, C. 1887-9, O. 1898.

1901 HOSFORD, JOHN STROUD - *The Grove, Stratford, E.*

1884 HOUCHIN, EDMUND KING - *Ravensworth, Cranbrook Road, Ilford, Essex,* and *28, Gordon Square, W.C.;* C. 1899.

1889 HUMPHREYS, FRANCIS R. - *27, Fellowes Road, South Hampstead, N.W.;* V.P. 1901, C.* 1892-6, Aud. 1893-7.

1884 JACKSON, GEORGE H. - - *Ashburton, Carew Road, Eastbourne;* C. 1890.

When Admitted.

1897 JOHNSON, HAROLD JOSSÉ, M.B., *37a, Finsbury Square*, and *29, Gracechurch St., E.C.*; C. 1901.

1898 KEARNEY, JAMES - - - *Royal General Dispensary, Bartholomew Close, E.C.*

1897 KELSON, WM. HENRY, M.D., B.S., F.R.C.S., *96, Queen Street, Cheapside, E.C.*; C. 1900-1.

1897 KERSHAW, WM. HENRY - *6, Southgate Road, N.*

1896 LANDON, ERNEST E. B. - - *Bradbourne House, Acton, W.*

1892 LANG, WILLIAM - - *22, Cavendish Square, W.*, and *Hackbridge, Carshalton, Surrey.*

1888 LONG, F. W. DEVEREUX - - *31, Finsbury Square, E.C.*, and *6, Spital Square, Bishopsgate, E.*

1901 LUFF, ARTHUR P., M.D. - *31, Weymouth Street, W.*

1892 LYON, THOMAS GLOVER, M.A., M.D., Secretary, *1, Victoria Square, S.W.*; Aud. 1895, 1898-9, C. 1896, S. 1900-1.

1900 MCCREA, BENJAMIN H. E. - *241, Green Street, Victoria Park*, and *50, Powerscroft Road, Clapton, N.E.*

1894 M'DONNELL, WM. CAMPBELL, *Park House, Park Lane, Stoke Newington, N.*; C. 1901.

1899 MCDOUGALL, W. STEWART, M.B., C.M., *2, Melbourne Villas, Wallington, Surrey.*

1891 MANSON, PATRICK, M.D., C.M., LL.D., *21, Queen Anne Street, W.*; V.P. 1901, O. 1894, C. 1895.

1898 MICHAEL, GUSTAVE, M.B., C.M., *188, Commercial Road East, E.*, and *5, Cambridge Place, Chester Gate, Regent's Park, N.W.*

1900 MICHELS, ERNST, F.R.C.S., M.D., *48, Finsbury Square, E.C.*

1901 MILLIGAN, WYNDHAM A., M.A., M.B., C.M., *Bethune Road, Stoke Newington, N.*

1894 MITCHELL, ALEXANDER, M.D., C.M., *86, Regent Street, W.*

1900 MÜRTZ, ANTON P. - - *Clareville, 48, Queen's Road, Finsbury Park, N.*

1896 NICHOLLS, SYDNEY RICHARD *185, Leytonstone Road, Stratford, E.*

1890 OLIVER, FRANKLIN H. - - *2, Kingsland Road, N.E.*; C. 1899.

1892 OLIVER, JOHN W., M.D., M.Ch. *Hackney Union Infirmary, Homerton, N.E.*; C. 1896-1901.

1884 OPENSHAW, T. HORROCKS, M.S., F.R.C.S., *16, Wimpole Street, W.*; V.P. 1896-7, C. 1890-1, S. 1893-4-5.

1888 PERRY, E. COOPER, M.A., M.D., *Guy's Hospital, S.E.*; C. 1893.

When Admitted.

1888 PITT, G. NEWTON, M.A., M.D., B.C., *15, Portland Place, W.*; V.P. 1899-1900, C.* 1891-1893, O. 1895.

1882 POTTER, GEORGE W., M.D., C.M., *8, King Street, Cheapside, E.C.*, and *Keldholme, Tunbridge Wells*; C. 1894-5.

1897 PRESTON, FRANCIS H., M.A. - *Gothic Lodge, Plumstead, S.E.*

1892 RAWES, WILLIAM, M.D., F.R.C.S., *St. Luke's Hospital, E.C.*; Editor of "Transactions," C.* 1896-1909, Aud. 1898-1901.

1888 REYNOLDS, W. PERCY - - *The Elms, 128, Stamford Hill, N.*; C. 1891-1893.

1896 ROBERTS, JOHN THOMAS - - *Meadow Lodge, Park Road, Crouch End, N.*

1897 ROBERTS, THOMAS - - *2, Selborne Gardens, York Road, Ilford, Essex.*

1900 ROBINSON, EDWIN WM. - *169, High Street, Homerton, N.E.*

1898 ROSS, DAVID, M.D., C.M. - *The Crescent, 346, Kingsland Road, N.E.*

1895 RUSHBROOKE, THOMAS, M.A. - *"Melrose," 93, Stamford Hill, N.*

1897 RUSSELL, AMBROSE J. - - *6, Creek Road, Deptford, S.E.*

1895 RUTTER, HUBERT L., M.D., B.S., F.R.C.S., *31, West Parade, Newcastle-on-Tyne.*

1896 SARGENT, HUGH C. - - *223, High Street, Shadwell, E.*

1884 SCARTH, ISAAC, M.B., B.S. - *29, Amwell Street, E.C.*; C. 1888.

1892 SEQUEIRA, GEORGE W. - *34, Jewry Street, E.C.*, and *"Oakleigh," Bush Hill Park, Enfield.*

1890 SEQUEIRA, HENRY J. - - *34, Jewry Street, E.C.*, and *"Clovelly," Bush Hill Park, Enfield*; V.P. 1901, C.* 1895-6-8-9.

1894 SEQUEIRA, JAMES HARRY, M.D., F.R.C.S., *13, Welbeck Street, W.*; C. 1898-1901.

1891 SHADWELL, ST. CLAIR B., M.D. *Lynhurst, Orford Road, Walthamstow, N.E.*; C.* 1895-6.

1888 SHAW, LAURISTON E., M.D. - *64, Harley Street, W.*; C. 1897-8.

1896 STEVENS, THOMAS G., M.D., B.S., F.R.C.S., *8, St. Thomas's Street, S.E.*; C. 1900-1.

1892 STOCKER, CHARLES JOSEPH - *Weston House, Romford Road, Forest Gate, E.*

1894 STONHAM, HENRY ARCHIBALD *30, Albert Square, Commercial Road, E.*

1896 SUMMERS, THOS. COLLYER - *69, Bow Road, E.*

When Admitted.

1880 SYMONDS, CHARTERS J., M.S., M.D., F.R.C.S., *58, Portland Place, W.;* P. 1894-5, V.P. 1891-2, O. 1895, C.* 1887-8, S. 1883-4-5-6.

1878 TALBOT, RUSSELL M. - - *117, Bow Road, E.;* C. 1882.

1889 TARGETT, JAS. H., M.B., M.S., F.R.C.S., Secretary, *6, St. Thomas's Street, S.E.;* C. 1896-7, S. 1898-9-1900-1.

1880 THORP, HENRY J. - - *Granite Lodge, Woodbridge Road, Ipswich;* V.P. 1895, C. 1892-3.

1890 TUBBY, ALFRED H., M.S., F.R.C.S., *25, Weymouth Street, W.;* V.P. 1898-9, C.* 1893-4, S. 1896-7-8.

1878 WALLACE, FREDERICK - - *Foulden Lodge, 133, Upper Clapton Road, N.E.;* C. 1881, 1886.

1887 WARNER, PERCY - - - *"Rydal," Woodford Green, Essex;* C. 1890, 1893.

1895 WASHBOURN, JOHN WICHENFORD, M.D., B.S., F.R.C.S., *6, Cavendish Place, W.;* C. 1899.

1901 WELLS, J. E. B. - - *Norris Lodge, Hoddesdon, Herts.*

1893 WILLIAMS, GEORGE ROWLAND *40, Queen Street, Cheapside, E.C.,* and *Lynton House, Palmer's Green, N.*

1897 WILL, J. KENNEDY, M.A., M.D., C.M., *Bethnal House Asylum, Cambridge Road, N.E.*

1895 WOOD, EDWARD - - - *Glebe Lodge, Windmill Hill, Enfield.*

1887 WOODS, JOHN F., M.D. - - *Hoxton House, 52, Hoxton Street, N.,* and *11, Cavendish Place, W.;* V.P. 1898-9, C.* 1894-5.

1899 WOOLLACOTT, FRANCIS J., M.A., M.D., B.Ch., *Eastern Fever Hospital, Homerton, N.E.*

1896 WORNUM, G. PORTER - - *58, Belsize Park, Hampstead, N.W.*

1889 WRIGHT, HOLLAND H. - - *2, Ospringe Road, St. John's College Park, N.W.*

[*It is requested that any change of Title, Appointments, or Residence may be communicated to one of the Secretaries before the Annual General Meeting, in order that the list may be as correct as possible.*]

CORRESPONDING FELLOWS.

Barlow, Robert - - -	*Orlebar, St. Peter's, Isle of Thanet;* C. 1886.
Barnard, John H., M.D. - -	*Villa Mai, Monte Carlo, Monaco.*
Canfield, Ralph M. - -	[*Boston, U. S. A.*]
English, Edgar, M.D. - -	*Mexborough, Rotherham, Yorks.*
Pierce, Bedford, M.D. - - -	*The Retreat, York.*
Roberts, Bransby, M.D. - -	*Ash Grove, St. Anne's Road, Eastbourne.*
Treves, William Knight, F.R.C.S.	*31, Dalby Square, Margate.*

N.B.—Written Communications on Medical Subjects and Donations of Books will be thankfully received.

FELLOWS ABROAD.

1894 Fyffe, W. Kington, B.A., M.D., *New Zealand.*

1896 Horrocks, Herbert, M.D. - *Devonshire Terrace, Perth, West Australia.*

THE EIGHTY-FIRST ANNUAL REPORT

OF THE

COUNCIL OF THE HUNTERIAN SOCIETY.

The Council is able to report another year of continual activity and prosperity. The meetings show a good attendance, and the discussions on the different papers and cases brought before the Society have elicited much interest. The roll of the Society now numbers 166 Fellows. Eight new Fellows have been elected during the year and five have resigned, i.e., Dr. Head, Messrs. Dean, McClymont, Wason, and Steen. Two Life Fellows have died, Dr. Heinrich Port and Dr. F. Charlewood Turner. Dr. Port joined the Society in 1875, and was Vice-President in 1888-9. Dr. F. Charlewood Turner's death is a severe loss to the Society. He took for many years an active interest in its work; having joined in 1877 he delivered the Oration in 1884, became Secretary in 1885-7, and was Vice-President in 1890-1, and Hon. Treas. from 1891 to 1899; he also contributed several papers to the Society's Proceedings, and exhibited many interesting pathological specimens. The Society has also lost by death one of its most distinguished Honorary Fellows—Sir James Paget. The world-wide reputation which he had earned by his professional ability, earnestness of character, and untiring energy and zeal, together with his faultless grace of speech, will place him for all time in the front rank of English surgeons of the Nineteenth Century. It may be fitly said that the mantle of John Hunter fell on him.

The Annual Oration was delivered by Sir Hugh Beevor, Bart., on February 8th, his subject being "The Declension of Phthisis." Having referred to the frequent remark of John Hunter as to the part played by hereditary susceptibility, cold and damp, in the causation of the disease, he

showed from abundant statistical and geographical evidence the remarkable diminution which has occurred in the death-rate from phthisis, and discussed the various factors which enter into the causation of it, and which have tended to bring about the declension of the disease, and emphasised the important influence of increased food supply to the individual, corresponding to the increased rise in the wages limit, and clearly pointed out the subsidiary influence of infection.

On February 22nd Mr. Charters J. Symonds gave the second Hunterian Lecture, on "The Individual Value of the Symptoms in Perforative Peritonitis," in which he fully treated of the different indications pointing to the necessity of early operation, and drew largely from his rich clinical experience in support of the views he put forward.

On March 8th Mr. R. H. Tubby read an instructive paper on "The Surgery of the Stomach," and recorded cases of successful results; and Dr. Fortescue Fox dealt with "Some Uncommon Nervous Symptoms."

Dr. Butler Harris, on April 26th, gave an account of his original work with "The Influence of Ozone on Micro-Organisms," and Dr. T. Glover Lyon demonstrated an ingenious and practical method of ventilation without draught, and pointed out the importance of its bearing on "The Open-Air Treatment of Disease."

On Oct. 11th Dr. Sansom delivered the first Hunterian Society's Lecture on "The Effect of Influenza on the Heart's Circulation; the Clinical History and Treatment." The subject was treated in a most exhaustive manner, and showed the deep investigation and clinical skill and acumen with which the author had given to the study of the disease.

On November 8th Dr. Newton Pitt introduced a discussion on "The Treatment of Typhoid Fever," which, by the able manner he treated this important subject, aroused so much interest that the discussion was prolonged over a subsequent meeting.

Dr. Dundas Grant read, on January 10th, a paper on "Cases illustrating Various Conditions giving rise to Nerve Deafness," and illustrated his remarks by a series of cases.

During the session many interesting clinical cases and pathological specimens have been brought before the Society. The Council wishes to express its thanks to those Fellows who have read papers and shown clinical and pathological material. In reviewing the work of the past session the Council feels satisfied in stating that there has been a steady continuance in the high character of the work performed, and it again looks to the Fellows to sustain it in carrying on and maintaining the level of usefulness and prosperity to which the Society has attained.

The Librarian's Report shows a satisfactory condition of the books and cases, and indicates an increasing use of Lewis's Library.

The Auditors' Report shows that the finances of the Society are in a satisfactory condition.

MEETING OF LIBRARY COMMITTEE.

JANUARY 23RD, 1900.

Present:—DR. FORTESCUE FOX, DR. SEQUEIRA, DR. OLIVER, DR. ARNOLD CHAPLIN.

The books of the Library were inspected and found in order.

The Committee suggest that before the Catalogue of the Library is made up a rough draft might be submitted to the Council to enable them to reject the duplicates and superfluous books.

The Committee inspected the books of the Savory Bequest, and suggested that a Committee formed from the Council should go through them and select such books as may with advantage be added to the Library, and take the opinion of the Council as to what should be done with the remainder.

The Committee note with satisfaction the use made of Lewis's Lending Library.

By order of the Committee,

ARNOLD CHAPLIN, Librarian.

BALANCE SHEET FOR 1899.

THE HUNTERIAN SOCIETY IN ACCOUNT WITH THE HON. TREASURER.

RECEIPTS.

			£	s.	d.
By Balance from 1898 account			66	13	1
,, Subscriptions—					
85 for 1899 at £1 1s.	£89	5 0			
2 ditto at 10s. 6d.	1	1 0			
5 Entrance	4	14 6			
10 Arrears	13	13 0			
2 in advance for 1900	1	11 6			
			110	5	0
,, Dividends on £382 8s. 6d. Goschens			7	12	6
			£184	10	7

EXPENDITURE.

	£	s.	d.
To London Institution	30	0	0
,, Messrs. Headley Bros., Printing	18	17	3
,, Subscription to New Sydenham Society	1	1	0
,, *Lancet*	0	15	9
,, Refreshments at Meetings, etc.	5	0	8
,, Insurance of Library	1	0	0
,, Hon. Treasurer, Postage (two years)	0	14	0
,, "Ceres" File for Library	8	2	6
,, H. Knight, Plumber, etc.	2	14	3
,, H. Cox, Loan of "X" Ray Apparatus	1	1	0
	69	6	5
To Balance	115	4	2
	£184	10	7

We, the undersigned, having examined the foregoing Account, together with the Vouchers, find the balance due from the Treasurer to be £115 4s. 2d. (One hundred and fifteen pounds, four shillings, and two pence). The funded property of the Society amounts to £382 8s. 6d. Goschens.

WM. RAWES.
HOPE GRANT.

HUNTERIAN SOCIETY.

THE ANNUAL ORATION, 1900.

THEN AND NOW; OR, THE INFLUENCE OF MODERN SURGERY UPON MEDICAL PRACTICE.

By Frederick J. Smith, M.A., M.D. (Oxon), F.R.C.P. (Lond.).

Mr. President and Gentlemen,—The responsibility of attempting to write and deliver an oration which shall be at once worthy of our godfather, worthy of your attention, and on a level with the many orations which have been delivered before the Society is too great to allow me truthfully to express any earnest gratitude to you for electing me orator, but I can at any rate thank you for the honour which you would wish to confer upon me, and can appreciate with a deep sense of respect the task with which you have rewarded my personal efforts on behalf of our Society for a good many years.

Hunter was born, as I am informed, in 1728, and died in 1792, and during his lifetime showed such capability of concentrated and continuous work, such intellectual activity, such power of analysing and arranging facts and theories, that the influence of his existence has been felt, and felt strongly, down to our time, and will continue to be felt long after we have passed away. None the less does it occur to me that it is hardly fair to him, however great and worthy he may have been, to keep on detailing annually all the incidents in his life, nor do I think that that is the type of oration which he would care to have maintained to keep his memory alive in our Society. I have therefore chosen

as my subject one which I hope may be as interesting to you as I am sure it would be to him could he but honour us to-night with his presence.

I have collected all the cases in which as a physician I have felt it right to call in the aid of a surgical colleague, and I propose in some measure to discuss them to illustrate the enormous benefits which the profession has gained by the incalculably valuable discoveries of the last half-century or so. It is, of course, a commonplace nowadays to mention that I particularly refer to anæsthesia, antiseptics, and Roentgen ray pathology. That they are beneficial discoveries, and that of a value utterly above computation, is of course quite beyond any shade of a shadow of doubt, but I would beg to be allowed to preface the real subject of my oration by a word or two, not of alarm or warning exactly, but of anxiety and caution, which may serve to raise in the mind of each one of us the question whether in our wholehearted enthusiasm for attractive novelties we may not in some degree be dangerously near to the risk of overstepping the boundaries between use and abuse. General anæsthesia, for instance, I care not whether produced by gas, chloroform, ether, the A.C.E. mixture, or combinations of any of them, has several times seemed to me to be responsible for something detrimental to the patient over and above the influence of the necessary manipulation of operative procedures; I have no doubt in my own mind, though mathematical proof of cause and effect would be difficult to give, that old quiescent foci of, or dormant tendencies to, disease have been lighted up into activity by the anæsthetic used to perform an operation. Quite recently I saw old tubercle of the lung started afresh *after* an operation for piles; the wound did splendidly and it seemed to me that the ether was the only attendant condition to which I could attribute the eruption of the smouldering mischief. Again, has not the anæsthetic a good deal to do with the deaths which are frequently put down to the shock of an operation in cases where this has been undertaken somewhat late, when the vital powers of the patient are at a low ebb? The subject of local anæsthesia in general surgery has received a good deal of attention abroad, and I would raise the question whether it could not find a wider field of application than it at present holds in exploratory operations. Lawson Tait and other abdominal surgeons have given us some reason to believe that the actual manipulation of internal organs is

possibly painless. In the great field of antiseptics, too, in our craze for slaughtering microbes wherever and whenever we meet with them, are we not in some danger of destroying friends with foes, and of paying too little attention to the soil on and in which these microbes grow and to the hostile influences with which the tissues, fluids, and cells of the body meet them. The futile efforts at cleansing the peritoneum after abdominal section is a case in point. Futile they must be, as my experience in the post-mortem room shows, when a hose at full pressure of the water company has failed to effect the purpose. Absolutely aseptic surgery is the acme of triumph of modern principles, and serum therapeutics bid fair to put a brilliant pinnacle even on the top of this; but in matters sanitary and hygienic I cannot help but feel that we are letting zeal outrun discretion, and putting upon modern hypotheses a too great burden of administrative practice. I am sure that by boiling milk we rob it of some property or material that is most valuable, if not essential, to the growing infant, possibly also to the nutrition of the adult. 'Tis true that we destroy any tubercle or other noxious microbes in it, but to me it seems at least possible that this security against a chance invasion may be bought at too high a price. We are terribly afraid of allowing tubercle bacilli an entrance to the stomach in this manner, and yet I have not the slightest doubt that all of us individually inspire and swallow hundreds if not thousands of them in the course of a few days' ordinary existence. The Klebs-Loeffler bacilli found in the fauces of patients as long as 100 days after recovery from an attack of diphtheria—found, too, in the throats of medical men, students, and nurses in fever hospitals—offer a subject for much discussion and deep thought, with great difficulty in the way of harmonising the imperious dictates of modern science, as based on our present hypotheses, with the experiences of practical medicine.

These few problems in pathology offer a most attractive field for study and discussion, but I must leave them now as they might easily be made to occupy all the time at my disposal, whereas I brought them forward merely to emphasise the thought that we must not consider that we know everything yet about the foundations of the noble superstructure which has enabled me to lay before you the following records.

My list comprises some 150 cases of more or less serious

trouble beyond the reach of our present knowledge of drugs or of general medical treatment, though the signs of the times are at least hopeful that in the future we may advance even in these directions. My numbers are too small for making any sweeping and generalised deductions, and, moreover, we can each of us only deal satisfactorily and thoughtfully with what falls under our own notice; in clinical medicine large piles of statistics may have their uses, but they do not drive an impression home to a conviction so securely as does a little rumination on one's own personal experience. It would be entirely out of my province as a physician to discuss the surgical details of the cases I am bringing forward. Those details I must leave to surgeons to think over, my intention is rather to discuss the questions, Have we advanced, and, if so, how far, since Hunter's time in the diagnosis of disease requiring surgical aid? and By what criteria in symptomatology shall we decide when to advise operation? Generally speaking, I shall endeavour to discuss these points in each of the groups into which I have divided the cases.

Carcinoma and Other Malignant Growths.

Of cases of carcinoma of the alimentary canal and its correlated glands (I may here state once for all that time will not permit me to go beyond the abdominal cavity) to which surgical interference seemed to offer the best chance of relief either from the disease or from very distressing symptoms I have submitted 18 to operation—viz., two cases of carcinoma of the œsophagus, three of carcinoma of the stomach, five of carcinoma of the intestine, and eight of carcinoma of the liver, etc., with ascites. My results, which, judged by statistics, seem to be about the average, were as follows. Of the cases of œsophagus cancer one patient died within a few hours of the operation from exhaustion and what one must term shock; the other patient lived nearly six months. In both cases a gastrostomy was performed. During the last few months a case has come under my personal observation in which a silver tube was passed through the growth and kept in position. Life was prolonged for some months afterwards, but the conditions of it as well as that of the case of my own after gastrostomy were so miserable that both the subjects more than once expressed a wish that death might more rapidly end their inevitable sufferings; and in cases of this nature and position of the

growth I have been led to form a very strong opinion that a policy of what amounts to euthanasia is the only one to be pursued—the gentle passage of a soft tube or bougie is the utmost I shall ever suggest in the way of manipulative efforts. Of the cases in the stomach itself two patients died within a week and one lived some three months with a fair degree of comfort; in all three no attempt was made to actually remove the growth; relief of vomiting was what was desired, and even in the rapidly fatal cases this object was attained. I am, of course, well aware that a more radical operation of removal has been performed with success more or less permanent in many cases, but my experience in the post-mortem room is such as to convince me that a real cure must be of the very rarest occurrence. However, in almost all cases the relief obtained, whether it be a rapid euthanasia or merely cessation of distressing vomiting, is so great that I have no hesitation in offering operation to the patient when other simpler measures have failed to alleviate symptoms; but it is an imperative necessity that the friends, at least, shall have it most clearly explained to them that relief from suffering is all that can be promised or even hoped for. Of cases beyond the stomach there are five, all admitted for obstruction of the bowels of a subacute nature; two patients died rapidly from the combined effects of the obstruction and of the disease; two were relieved and lived in tolerable comfort for some months; and one, a woman, 48 years of age, who had for a long time suffered from abdominal trouble and who was found to be suffering from carcinoma of the splenic flexure of the colon, is still alive and well (20 months after complete removal of the growth). Now a fatal event in carcinoma of the intestine is almost invariably brought about by obstruction with or without one of its commonest complications—viz., peritonitis from perforation. This obstruction itself renders surgical interference imperative to prevent a most distressing death; therefore, knowing that such obstruction is practically inevitable at some period, and knowing, too, that the mesenteric glands are rarely involved before obstruction occurs, I say that we must urge operative interference as soon as we have reasonable evidence that carcinoma has begun to grow in the intestine; even one or two cases such as my last give us additional encouragement to advise such procedure. (N.B.—I must here draw attention to the fact that I have not spoken about growths below the sigmoid:

such as occur in the rectum belong almost purely to surgery. If the choice of an artificial anus or euthanasia were offered me under such circumstances the latter would be very attractive.) Of growths in the liver, etc., causing ascites I have had some eight to twelve cases; all were, of course, rapidly fatal. The exploratory operation and its results will be mentioned later.

Such are my results; how do they compare with what Hunter might have done? On *primâ-facie* consideration they seem to give us an enormous advantage over him, and no one can deny that we know much about cancer which he did not, but closer examination shows, I think, that at present our advantage is not so overwhelming as some enthusiasts would believe.

The deepest researches into the minutest structural details of the growth by the aid of optical instruments of a delicacy and precision of which Hunter had no conception have seemed to give us a hint of a possible microbiotic activity in such neoplasms. Experimental work has hardly corroborated such views, though it has not contradicted them very seriously, and investigations into the local geographical distribution of cancer have rendered some, though feeble, support to such a view. Nebulous as the hypothesis may be at present it suggests to us the glorious possibility of our some day being in a position to lay down rules of precision as to the prophylaxis of cancer, and that will indeed be a triumphant position; as yet it is not.

Once a growth has begun and its malignant nature is suspected we have at our command means of scientific examination to determine with almost mathematical precision its exact nature and probable clinical course. It is to surgery and physics—knowledge of optical instruments—that we are indebted for this power. A general anæsthetic will allow us to examine an abdomen more completely and accurately than was possible for Hunter to do. All this is pure gain, and so, too, is the method of hypodermic medication by morphia and other drugs for the relief of pain. It is said, moreover, that the absence of hydrochloric acid from the gastric contents is strong evidence that a case which may be simple or malignant ulcer of the stomach is in reality carcinomatous, but I doubt if the information does much to save life or even suffering. I shall have a word or two more to say on the point when I come to speak of gastric ulcers.

To sum the matter up, we have gained but little in clinical diagnostic precision, much in scientific knowledge, and most of all in our powers to soothe the passage to the grave by means of hypodermic medication and operative relief to urgent distress. Cases in which we urge operation must be carefully selected; but when, on the other hand, the patient or friends urge us to do something, we should not, provided we explain matters thoroughly, be too shy of operation, for even euthanasia on the table or within a few hours is a boon for which many a sufferer must be only too thankful. (The position of the operation of oophorectomy for cancer of the breast is as yet too insecure for me to offer any opinion upon it.)

Ulcer of the Stomach.

Of ulcer of the stomach I have had only one case that has perforated while the patient was in hospital; the patient recovered after the operation as we were able to act promptly. In private practice out of over 60 cases of fairly definite evidence of ulcer, in no less than 10 of them had perforation taken place, and out of these 10 only 2 recovered, owing to the long interval that had elapsed between perforation and operation, in some of them owing to the absence of recognition of the serious accident that had occurred. One may say that after perforation had occurred operation is absolutely imperative if life is to be saved; and, further, that if operation is performed early enough a good result is reasonably certain. In speaking of cancerous growths we always have a dread, based on an only too common experience, that whatever we may do in the way of removal the disease will sooner or later, generally very much sooner, reappear in an aggravated and hopelessly inoperable form. It is this dread which stays our hands and makes us so diffident in recommending operation. Here in our present section, and I may say in the other sections of surgical emergencies with which I propose to deal, there is happily no need to fear such a mysterious and baneful influence, and we are free to deal with present difficulties without any particular anticipation of their recurrence. If life can only be saved from the danger which at the moment threatens its extinction there is no special reason why health should not be completely restored. What, then, may we ask, is our position compared to Hunter's in dealing with gastric ulcer? Hunter was as well aware as we are that ulcer occurs. He knew that profuse hæmatemesis or melæna

in a young girl indicated the opening of a vessel in the stomach or the duodenum; he knew, too, that perforation of an ulcer occasionally took place, and I am sure that no one regretted more than he did his absolute impotence to give aid in face of this then inevitably fatal calamity. Now in regard to a positive diagnosis I doubt whether we are much better off than Hunter was. We can talk very glibly of hypo- or hyper-chlorhydria, of succorhæa gastrica, or its reverse, of atonic dyspepsia, etc.; we can test for hydrochloric acid in the juice and think if it be absent that we have probably carcinoma to deal with; we can, if — a big *if* — the patient will let us, give test breakfasts and pump up the resultant digesting mass; we can still say with Hunter, "Here is an ulcer," because of a profuse hæmatemesis; and when pain is very severe and localised and relieved at once by vomiting we can believe that an ulcer is present and treat the patient as though it certainly were so. But with all this and with all our fancied skill and all our instruments for examining the stomach I assert unhesitatingly that it is still impossible and I fear will always remain so, to exclude the presence of an ulcer, to prove a negative diagnosis. It must be the experience of all of us, whether by the bedside or in the deadhouse, that a profuse hæmatemesis or a fatal perforation has been absolutely the first indication that anything has been wrong with the stomach, except perhaps the very mildest and negligible degree of indigestion or discomfort after meals. Can we, any of us, assert that Carlyle certainly had a chronic ulcer and not a simple painful dyspepsia? There is no symptom and no group of symptoms of an ordinary character—i.e., excluding hæmatemesis and perforation—that may not exist with or without ulceration. If, however, we have not learnt by what test we shall exclude an ulcer we have learnt with some accuracy the natural history of an ulcer when left alone or when it persistently refuses to heal, and this problem will bear a little discussion from my present point of view of surgical interference. It combines the consideration of prognosis and modern treatment. We know by experience that hæmatemesis is happily but rarely fatal in its first onset; out of over 50 cases of this very alarming symptom when due fairly certainly to ulcer I have only known three in which death was directly due to the first bleeding, and one of these was probably tubercluous. It occurred in a man, about 40 years of age, who was suffer-

ing from advanced phthisis and on necropsy the blood which filled the intestines from the stomach to the anus was found to come from a small hole in the cardiac end of the stomach quite unlike a simple ulcer; there was an obvious lateral opening into an artery into which a small probe could be passed. In face of this fact, then, it is obviously quite unjustifiable to suggest operative interference upon the primary occurrence of hæmatemesis however profuse it may be. But when an ulcer, or a suspected one, shows a tendency to continue to bleed with repeated attacks of hæmatemesis or persistent malæna, so that life is threatened by severe loss of blood, then I think we ought to ask a surgeon to interfere. For this particular accident I must admit that I have not yet* had occasion to call in surgical aid, but several such cases are reported and more, no doubt, have been met with. Hæmorrhage of a profuse character is more commonly associated with the small, rapidly occurring or acute ulcer; perforation, on the other hand, I believe, is more a characteristic of that ulcer which, whatever its early history may have been, shows on ocular examination distinct evidence of having been present for some time. It is as large as a shilling at least, and often much larger, and its edges are usually very thick and prominent, and they, as well as the adjoining portions of the stomach, are more or less indurated, and possibly puckered, by fibrotic change as though an attempt at healing were being made. Such an ulcer we have learnt has a fatal facility for perforating (for bleeding, too, on occasion) and that without any warning. It has, also, two other features which cannot be ignored. The first is a clinical one—viz., that by the severity of the pain or discomfort the patient may be brought by starvation to the verge of death, or at least may be made such a social cripple—incapacitated from domestic work or taking any pleasure in life—that any measures which offer a reasonably safe chance of recovery should, I think, be placed before him; and the other is a pathological problem—viz., that carcinoma may develop in or near the seat of the ulceration. I have seen at least two cases on the post-mortem table in which a chronic ulcer was in such association with a carcinomatous lump as to leave no doubt on my mind at the time that there was a specific

* During the last week and since this oration was completed a case has occurred in my practice. Since operation no more bleeding has occurred, and the patient is doing remarkably well, and has left the hospital cured.

illustration of effect and cause. Now in face of the chances of (1) hæmorrhage, (2) perforation, (3) social crippling, and (4) carcinoma, it is to my mind a very serious question whether we should not urge surgical exploration in cases where we have reasonably strong grounds for suspecting an ulcer of the stomach which has lasted for, say, over three months. We cannot tell when the fatal accident may occur, but forewarned is forearmed, and anæsthesia and antiseptics have given us a power of dealing actively with the stomach such as Hunter could scarcely have dreamed of. He had nothing—we have everything, and I think it our duty to use what we have.

Since I began to write this oration two such cases of persistent ulcer have come under my care; both have been subjected to laparotomy with success complete up to date, but the period which has elapsed is too short to say if it will be permanent. At any rate, the freedom from pain and the restoration to an active and even enjoyable life have been such pleasant results, even if only temporary, that I shall be led to advise a much more frequent and perhaps even much earlier resort to exploratory laparotomy than hitherto in similar cases.

To render my position clear I might summarise my views on operative interference in cases of gastric ulcer thus: on the first occurrence of hæmatemesis, or on first making a diagnosis, medicinal measures alone should be tried; on a rapid reappearance of hæmorrhage I would invite consideration of operation; on a third repetition or confirmed persistence of hæmorrhage I would urge it. When the diagnosis rests on a less secure foundation—i.e., pain, etc.—I would insist upon rest in bed with slop diet for a fortnight; the disappearance of the symptoms on enforced rest in bed even without greater strictness in diet is to me a somewhat mysterious, but none the less indubitable, fact. If with resumption of active life the symptoms recurred I would again on the second recurrence begin by suggesting operation, and on the third recurrence most strongly urge it. These opinions are, of course, quite apart from the urgent and absolute necessity of operation for perforation.

Gall-stones and other Hepatic Conditions.

Of gall-stones I have had 12 cases in which I deemed it best for my patient to ask the surgeon to give relief. Two of these patients died, both, I am sorry to say, from peritonitis

following the operation; but as in both of them suppuration had already occurred previously to surgical interference my figures hardly represent a fair average of mortality inasmuch as the time for operation, could we only choose it, is before suppuration, not after it. It is in the relief from gall-stones that conservative surgery has won some of its most brilliant successes.

That Hunter was fully aware of the existence of gall-stones and of the tricks which they may play upon their victims by causing colic, inflammation, suppuration, and intestinal obstruction is of course certain, but until these had reached a dangerous, if not even a fatal, condition it was absolutely out of the question for him to consider surgical relief, however much he may have regretted his inability to afford assistance.

As regards the natural history of gall-stones we have undoubtedly accumulated from the post-mortem room and the bedside a great deal of knowledge which was beyond Hunter's range of vision, and this we have turned to good account in prophylaxis and in medical treatment in the early stages of mischief from the concretion. My experience has convinced me that in salicylate of sodium, a drug undiscovered in Hunter's time, we have a substance which acts most favourably on the biliary passages and on the secretion, tending to restore health to the one and to expediate the removal of the other. But it is, of course, in our power to examine the patient under general anæsthesia and then in our power fearlessly to open the abdomen and to act upon the condition found that the enormous difference between ourselves and Hunter consists. With us it is now simply and solely a question of choosing the time and the case upon which to operate.

The following case illustrates as well as any our position. In November, 1895, I was asked by Mr. H. E. Simpson to see a woman, aged 28 years, who had been ill for over five weeks with a vague illness that had been called at one time influenza and at another typhoid fever by the several medical men under whom she had been. I confess when I saw her that I could frame no possible diagnosis, as she was so exceedingly tender in the abdomen that examination to serve any useful purpose was quite out of the question. I had her removed at once to the hospital and under an anæsthetic we immediately felt a large hard tumour in the neighbourhood of the gall-bladder. There was no room for hesitation that this was the

cause of her agony and equally none in advising immediate operation, when a large gall-stone was found lying in a collection of pus. She made an uninterrupted recovery after its removal. In 1898 I had a precisely similar case in a man aged 50 years, with an equally happy result.

The point that we have to try to determine is this, Under what circumstances is operative relief necessary or advisable? I hold it to be so for three conditions which, though primarily different, are apt to merge one into the other or even to be combined with one another: (1) if there be a large stone, too large to escape per vias naturales; (2) if there be a large accumulation of smaller stones causing obstinate, frequent, or long-continued trouble; and (3) if suppuration has occurred round a stone of any size. Our problem is to determine that one of these is present and if possible to ascertain which of them.

Now, if a small calculus forms, or even two or three, and by attempts to escape causes colic followed by jaundice the attack may be expected to subside in, say, five or six days; if it does not do so we begin to be suspicious. During the time which elapses between the onset of pain and the conclusion of the illness the motions should all of them be carefully sieved, both to clinch the primary diagnosis by the discovery of a stone or *per contra* that the absence of a stone may be carefully noted for future reference. Now, no one would dream of recommending laparotomy in the early days of a first attack of biliary colic, and especially if a stone is found in the fæces. If no stone be found then if the attack of pain persists for, say, longer than from two to three days, or if it dies away to recur even after a long interval, we have additional reason for supposing that the cause of the trouble has not disappeared, and with each day's persistency of symptoms or with each recurrence of them we get stronger and stronger evidence that one of our three operative conditions is present—in fact, one may say that these recurrent attacks of local pain, associated or not with jaundice according to the precise position of the stone, but nearly certainly associated with a gall-bladder large enough at least to be felt,—these attacks, I say, are the strongest diagnostic features of a stone too large to pass per vias naturales, for they are due to its ball-valve-like action in the duct. This, too, is the commonest feature if large numbers of smaller stones are present, for the actual symptoms are generally caused by one more pushing than the rest.

The third condition, that of suppuration in the gall-bladder or round an encysted stone, is not so easy of diagnosis. The physical sign of an abscess—i.e., a definitely fluctuating tumour—is conspicuous by its absence, and even when such a tumour is present it is almost invariably the gall-bladder itself, which it is true may be full of pus and certainly, if definitely felt, even though the contents be bile or mucus, is an almost absolute indication for operation. The *symptoms* of suppuration in this region are misleading, or perhaps I should say are extremely difficult to discriminate from those of any simple non-purulent affection of the biliary passages. The following brief outline of a case seen with Dr. T. C. Winn illustrates admirably these difficulties.

The patient was a man, aged 25 years, who, after a heavy indigestible meal of cockles and pork, etc., was suddenly seized with intense abdominal pain, which at first was naturally attributed to acute indigestion. When some three or four days later rather severe jaundice appeared it was naturally thought that in so young a subject and with such a history this was due to catarrh of the bile-ducts. But the pain would not disappear nor would the jaundice lessen, and when a hectic temperature ranging to 103 deg. F., associated with most profuse nocturnal sweating, followed—a sign very strongly suggestive of pus in a doubtful case—the assumption was very naturally arrived at that suppuration had occurred in or near the gall-bladder—a diagnosis in which I must admit I fully concurred when I saw the patient on the twelfth or thirteenth day of his illness. There were the cachexia with sunken eyes and the rapid small pulse such as are usual with pus. Accordingly I had the patient removed to the hospital, and on the next day, as the symptoms were not mitigated in any way, the abdomen was opened. We found nothing—not even a stone or a drop of pus. Subsequently to the operation most definite signs of pericarditis and of left-sided pleurisy developed, and so certain was I that these indicated pus that had escaped observation that I should have advised further exploration to evacuate it had not the patient seemed too ill to stand such measures. However, whether pus was there or not, he eventually struggled through without any being seen, and left the hospital practically well, and I can only conclude that the whole illness was one of severe catarrhal jaundice. Whether a blood-count would have saved us from the mistake I cannot positively assert, as I was not then sufficiently

alive to the value of a leucocytosis as an indication of a concealed suppurative focus. In the future the absence of a leucocytosis will make me more chary of suggesting operation, though I can only say now and repeat it, that if with the symptoms presented by this man pus be not forming I know not by what other symptom than a leucocytosis I can recognise it. I do not know that even now the operation is to be very much regretted, for if pus be present the chances of the patient's recovery are small almost to vanishing-point, while recovery from a merely exploratory laparotomy is almost a certainty. It is in this statement that the situation can now be summed up.

Of hydatids and large hepatic abscesses I do not propose to say anything. I have had three cases of the former under my care and five of the latter, but the treatment is so obviously and imperatively surgical that no question can arise for a physician except that of diagnosis.

Exploratory Operations and Ascites.

I now pass on to a group of abdominal cases in which for some reason or other the diagnosis is obscure. One of the commonest reasons for this obscurity is ascites, which even under an anæsthetic prevents a thoroughly satisfactory examination of the abdominal organs. To the treatment of this ascites I shall presently devote some considerable attention. As regards swellings (other than ordinary ascites) and tumours and abnormal abdominal conditions of doubtful origin, connexions, and pathology, there is a universal consensus of opinion that they must be investigated by a laparotomy if they are giving rise to symptoms which so seriously cripple the patients as to lead them to ask for relief even at the cost of a serious operation or if in our opinion they are tending to a fatal issue unless radical relief can be obtained. Of such obscure cases, excluding ascites, I have had twenty-three operated upon. Inasmuch as after operation the diagnosis has been cleared up the cases have been reckoned in their appropriate categories. I have not figures of mortality to give, but I can most definitely say that I have rarely, if ever, had any occasion to regret the performance of the operation either for my own reputation or for the sake of my patients. No patient has died directly because he was opened; some have undoubtedly died from the difficulties of removing a removeable condition, and that death has been hastened by a few days in cases

which, had we but known it, were inevitably foredoomed to an early grave I am prepared frankly to admit, but such death was invariably robbed of its most distressing features, and euthanasia is not always to be despised as a gift to suffering humanity. It was one which Hunter dare not and could not give to his patients.

For some years I have held a strong opinion, and I gave it public vent as long ago as 1896, that the proper method of dealing with ascites was to have the abdomen opened by a surgeon when purges, diaphoretics, and diuretics had had a fair chance, or when there was no time to use them owing to the urgency of the case. I am glad to see that there has been lately a steadily increasing current of opinion in the same direction. I have had the operation performed at my suggestion in hospital and private practice some 50 times or more—in some cases of heart disease and cirrhosis of the liver the records have escaped observation. I advocated, and still advocate, it on the following grounds: (1) it is more scientific than paracentesis; (2) it is safer for the patient; (3) it assists diagnosis where that is doubtful; (4) it permits of the removal of removeable causes; and (5) it sometimes cures cases which are otherwise incurable. On each of these points I wish to say a few words.

1. *It is more scientific.*—This statement requires no argument; it simply means that for a blind but very sharp piece of steel passing through goodness only knows what we substitute the exactitude of sight and touch of a skilled surgical hand which can tell preciseley how far it has gone and what it is going through and has power to deal properly with any abnormality of vascular distribution or with any pathological condition as it proceeds onwards to what may be termed the dangerous area of the peritoneum. Before operation we are in absolute ignorance of even the presence of adhesions, let alone their position.

2. *It is safer for the patient.*—This would seem to follow at once as a natural scientific corollary to the first proposition, but I must admit that there are two sides to the question. On the one hand, I can certainly say that I have never seen death arise from a simple exploratory laparotomy where no attempt has been made to perform further surgical manipulation, while I have seen several cases on the post-mortem table in which acute peritonitis has followed the use of the trocar—to say "caused by" is perhaps too strong

a term because stringent precautions had been taken to prevent the entrance from without of microbes, and I could find no wound of the visceral peritoneum covering the gut, but still we must remember that the intestines are inhabited by a very mixed population of microscopic creatures, some undoubtedly always peaceable and useful citizens, but others of a distinctly turbulent character, always ready for mischief, and some positively living only to do harm if they can get a chance, nor do they require for this chance an injury appreciable to the naked eye, scarcely even to the microscope.

Again, I am bound to admit that either the shock of the operation (whatever that may mean) or the influence on the constitution of a general anæsthetic has seemed to affect for evil the pathological conditions under which the patient was labouring, so that more than once I have been obliged to wonder whether the operation has not accelerated the downward progress of a disease—e.g., advanced cirrhosis of the liver or severe morbus cordis—which though no doubt fatal in itself at an early date might have permitted some prolongation of life, accelerated it, I say, more than the unrelieved ascites would have done. Here is another great field for local anæsthesia, for I have formed a strong opinion that the influence of the general anæsthetic is responsible in a greater degree than the shock for the untoward effects. I have not yet had the courage of my opinions and had a laparotomy performed under the influence of hypodermic injection of cocaine or of water by Schleich's method, but I feel confident that it is the right thing to do, especially for such cases as those taken as illustrations above, where actual exploration of the peritoneal cavity is unnecessary or where exploration having once been done the re-accumulation of the fluid renders a repeated emptying of it necessary. It may be objected to such a procedure that in opposition to the simplicity of the trocar and cannula, with its one bold plunge, it is too complicated without specially skilled surgical assistance, and that there is great danger of sepsis from leaking. To the first point I would reply that I am no strong believer in the supposed want of skill in our general practitioners—they are too well taught nowadays; and to the second I can say that I have myself known a case in which the hole made in an œdematous abdominal wall by a trocar refused to close for over a week, fluid steadily leaking all the time, without any peritonitis, and that in a poor woman in a London slum without any skilled nursing or for the matter

of that any skilled attention at all. On the whole, then, I think that we are justified in saying that operation on its own merits is safer for the patient than the trocar.

3. *It assists and clears up a doubtful diagnosis.*—This proposition only requires to be stated to be at once admitted by all as self-evident. It would be at once superfluous and tedious to enumerate illustrations of cases of abdominal surgery where previously to the operation either no positive diagnosis at all had been arrived at or one totally and absolutely erroneous. Only within the last year four cases worthy of mention have occurred to me in which ordinary—so far, that is, as sight and touch would make them so—cirrhosis of the liver was causing ascites and yet in which the exceedingly abstemious—in one case absolutely teetotal—habits of the patients had prevented me from even taking the condition into consideration in guessing at a diagnosis. But who amongst us would be rash enough to claim diagnostic infallibility as to the cause of a given ascites?

4. *It permits at one sitting of the removal of a removeable cause.*—This statement has, of course, a much wider range than the consideration of mere ascites, but it must be placed here because, as I have already pointed out, the accumulation of fluid in the peritoneal cavity so frequently masks its own underlying cause, which can only be ascertained and possibly dealt with after removal of the fluid. Such complete investigation is obviously impossible through a cannula, however large. A bare list of the conditions here referred to capable of complete removal by the surgeon with years of enjoyable health, but not capable even of palliation by medical measures, forms a *monumentum ære perennius* to the development of nineteenth-century surgery. It includes not only those conditions which I am in this oration briefly considering, but also nearly every pathological condition of the abdominal organs. The statement itself needs no demonstration; it is a self-evident proposition and carries with it a strong argument in favour of my contention as to the correct method of dealing with ascites when that is the preliminary and very imcomplete—though correct as far as it goes—diagnosis.

5. *Cases usually considered incurable have recovered after laparotomy.*—Mr. Treves, the late Mr. Greig Smith, the late Mr. Lawson Tait, and, in fact, I may say all surgeons who have had much experience of abdominal work have reported

cases in which after an exploratory laparotomy the patients have completely recovered notwithstanding that an apparently incurable, and certainly irremoveable, malignant neoplasm or other condition was found, while tuberculous peritonitis shows such a remarkable percentage of cures by laparotomy that this has become the one universally recognised method of treatment in all cases in which effusion—as opposed to mere adhesive inflammation reaction—is a prominent feature. These results are beyond all dispute, and are now accepted as demonstrated facts, but so far as I am aware no such results are recorded as occurring after the mere withdrawal of the fluid by means of a trocar and cannula.

A good deal of speculation has been hazarded as to the meaning of the phenomena in question. To me the most reasonable explanation seems to be those views which attribute the good results to the free entrance of oxygen into the peritoneal cavity, and I feel inclined to suggest that more active steps might be taken in this direction by the intentional introduction of pure oxygen or even of ozone, the more active form, at the operation or subsequently through a tube. I cannot see what possible harm this could do and we know that such oxygenating applications have been of very material benefit in ulcerative conditions of the extremities.

These five points constitute, I think, an unanswerable case in favour of laparotomy against cannular drainage at least once in the course of every case. Should repeated emptyings of the peritoneum become necessary the practical difficulties in the way of multiple laparotomies may render paracentesis justifiable, and I must admit that, at any rate in remote country districts, it may be almost impossible to operate by the knife. I can only hope, and do sincerely believe, that future experience will demonstrate simpler means of operation and that the difficulties in the way will steadily diminish until they disappear altogether and relief by the knife becomes the rule.

Appendicitis.

Hunter can have known little or nothing about this trouble. He knew that cases of acute pain in the abdomen with special tendency to be localised to the right iliac fossa occurred and without the peculiar features of either renal or biliary colic, and that some of such cases were followed by recovery and relapse, while others speedily ended in general peritonitis and death, but he was equally powerless to render

efficient aid either to the relapsing or to the fulminating cases.

To consider adequately the views held as to the pathology and treatment of the affection, all of which are the result of modern observation and surgical development, would alone occupy the whole of the time at my disposal. I can here only deal briefly with my own cases and experience and the lessons which they have taught me. I have 38 cases of which the results, temporary or permanent, are known to me. They fall into the following groups: one case of perforation which was watched in hospital and in which operation was declined; four cases operated upon but in which the patient rapidly sank; eight cases operated upon in which pus was found and the patient did well; 19 mild or relapsing cases with successful operation; and six mild or relapsing cases in which operation was refused.

The case which was taken into hospital for observation and in which the patient died without being operated upon made the greatest impression upon me and I may briefly detail its particulars as it seems to contain an epitome of our difficulties.

The patient was a young man, aged 26 years, who in the midst of apparent health was seized one Saturday morning with a pain in the abdomen which gradually got worse. He was at the same time sick, but not very violently so; the bowels had acted quite naturally that morning. The pain, never very severe, continued during Sunday and Monday and became more localised in the right iliac fossa. There was no more vomiting, but the bowels did not act again. I saw him on the Tuesday morning and found him looking fairly well. The tongue, which was rather dirty, was not dry. There was no nausea and the bowels had not acted since the onset of the pain. The pulse was only 100 and seemed fairly good. There was some fulness to be felt in the right iliac fossa and tenderness over it, though he could well bear gentle manipulation. I admitted him at once for observation and immediate operation if necessary. On the Wednesday the bowels acted freely of their own accord, and he seemed so much better that operation was deferred. In the evening he got worse quite suddenly and was in such a collapsed condition that permission to operate was then refused, and he died on Thursday morning early. How can we avoid such distressing results?

The history of many cases which have been operated upon

within a few hours of the commencement of the pain and yet in which pus has been found leaves no room for doubt but that very frequently inflammatory trouble of some sort can arise inside the appendix and be absolutely latent so far as any symptoms or complaints by the patients are concerned for some time. The first warning signal, I believe, is always pain, and what this pain indicates it is our most special business to find out. I believe it invariably indicates that the inflammation has at least reached the peritoneum, and this it seems able to do in one or two clinical forms, either (1) as an adhesive peritonitis or (2) as a distinct perforation which must inevitably lead to a suppurative peritonitis, local or general according to circumstances. Now, if at the onset this pain is so severe as to cause very marked collapse and persistent vomiting with a small thready pulse and cold, clammy sweat, there can be no room for hesitation—immediate operation is the only chance which the patient has of recovery. Such severe pain and attendant phenomena of collapse are, however, the exception, and more commonly the history is that the patient has been seized with the pain and been sick but that in a short time things have assumed a less threatening aspect, and when we arrive on the scene we find the patient fairly comfortable, complaining only of a little pain, but probably of great local tenderness, and it is here that our difficulties commence, and from this point that our judgment may lead us grievously astray. We have *primâ facie* strong ground of reason to wait for a few hours to see what an ice-bag applied locally and salicylate of soda in 20-grain doses will do, but during these few hours the patient must be most carefully and continuously watched with the very keenest eye for details; especially must we look for complaint of a feeling of sinking or collapse on the part of the patient, a quickening of the pulse, a rise or marked fall of the temperature, a drying or fouling of the tongue, an increase of the pain, the slightest sign of distension of the abdomen or hardening of the muscles on the other side—any untoward development of this character is a warning that the case must not be left any longer without surgical aid. In any case a second visit must be made by the medical man himself within 12 hours at the outside for further personal observation and to receive the report of the nurse left in charge. At this second visit a decision should, if possible—and generally I think it can—be made as to

the actual presence of one or the other of the two clinical forms of trouble — viz., adhesive as against suppurative inflammation. We may not yet get positive information as to whether the former is or is not going to be superseded by the latter. If it be the former we are not likely to have any of the above-mentioned tell-tale indications; if the latter, some of them are, I think, sure to be present; they are, to my mind, more important than the local physical signs in the abdomen. The presence in the right iliac fossa of something unusual which can be felt is pretty nearly constant, and I do not think that the softness of it (unless, indeed, it is definitely fluctuating) or the hardness can be accepted as a guide to operation on the one hand, or on the other as an indication that we may safely continue medicinal measures alone. We shall, however, perhaps most frequently, decide that we may still wait and the case will then pass on into a more chronic condition. Our faculties must still continue to be exercised to their fullest capacity, but we now have time to watch for the development of the more common indications of pus formation—the flushing of the cheeks or the yellowish toxæmic tinge of the skin, the sweating at night, the hectic type of temperature, and even to look for leucocytosis of the blood which may rapidly develop. Any of these features, especially if combined with any of the former acute symptom group, again makes operation imperative, for we know that pus has formed and we have not the remotest chance of knowing in which direction it will penetrate. That it can be absorbed when once it has formed in this disease I have not a particle of *a priori* reasoning—very much the reverse—or of post-mortem experience to tell me. If happily matters *progressively* improve; if the temperature becomes lower, but not subnormal, at each observation; if the pulse is of natural frequency, the face regaining a healthy appearance, the tenderness steadily diminishing, and the patient in every way doing well, operation may be delayed till the attack is over, but I should then as strongly urge operation as I would advise a man not to sleep on a barrel of gun-powder when sparks were flying around. To sum up my conclusions, we must operate in cases of appendicitis (1) instantly in fulminating cases; (2) as soon as we can be reasonably certain of pus in the less acute cases; and (3) after the subsidence of an attack in the milder cases.

Renal Troubles.

Stone and tubercle are the only two conditions which I have to mention as coming under the heading of this oration. I have not had a case of cancer of the kidney in which operation was indicated. I have had ten cases in which pus, blood, or gravel, or combinations of these in the urine have induced me to ask for assistance from a surgical colleague; eight of them proved to be cases of calculus and two of tubercle. Of the tuberculous cases one patient was operated on in 1896 and is still alive with only one kidney; the other sank rapidly from the development of tubercle in other organs, verified by post-mortem examination. In all the eight cases of stone the patients recovered with, of course, permanent (up-to-date) relief from their symptoms.

Now, what is our present position with regard to these renal affections? Of tubercle we know that it occurs as part of a generalised tubercle which has no interest for us at the present moment. Post-mortem experience teaches us that it may occur as a gross lesion in one kidney only and apparently remain confined to that organ for a long time, but it also teaches us that perhaps more frequently both organs are affected. Hence I would say, if we are sure from bacteriological examination—for our present purposes there is no other possible means of diagnosis—of the urine that one kidney is affected with tubercle, we should be very cautious about advising operative interference. By every means in our power, manual and cystoscopic, we must endeavour to ascertain which kidney is affected, and not only that, but that the other one is sound. Even if we believe that one is healthy I would still advise a month's course of creasote treatment, for this is the only drug which in my experience exerts any special influence on tuberculous internal lesions, and only then, and when still convinced that the other organ is sound, would I advise operation.

With regard to stone in the kidney the position is somewhat different, for though it may in a sense be a constitutional disease, it is one which results in a purely local trouble, and if we can remove this trouble there is an excellent prospect of prolonged and healthy life. On the other hand, we know that the prolonged presence of a stone will eventually cause such a disturbance of the organ itself as will threaten life. The natural inference is, then, if we get symptoms pointing unmistakeably to stone, that it is our imperative duty to remove it as speedily as possible before

consecutive changes in the kidney occur. We must first make a differential diagnosis between stone and tubercle—not an easy task, but one which I have discussed at some length elsewhere.* Here I can only mention (1) bacteriological examination of urine, a positive result from which is of course conclusive; (2) the administration of a few small (10-minim) doses of turpentine, which by exciting activity in the kidney and pelvis will cause pain if a stone is present, and so give us useful information; and (3) an x-ray photograph or screen investigation. The latter, like the bacteriological examination, is, I think, only useful when a positive result is obtained. At any rate, last year I had a patient subjected to that means of investigation with a negative result, but the severity of his pain and its localisation to one kidney led me to advise, and him to consent to, an exploratory operation, when an oxalate calculus was found embedded in the substance of the right kidney and was removed with perfect relief.

I must admit that some patients in whom we believe a renal calculus to be present seem to do well, even for years, with simple dietetic and water treatment, but I have no proof at all satisfactory that distilled or any other water will dissolve a calculus once formed, whether situated in the substance or pelvis of the kidney. Hence I believe that we are acting for the best interests of our patient in calling in surgical aid at once without waiting for an insidious uræmia to end his life, or for further attacks of colic to render that life unspeakably dreary. A mere exploratory operation entails but a minimum of risk, and will, in the future, entail none, or at any rate risk so slight that even in a first attack of renal colic, unless a stone be actually passed, I would say the less delay in operating the better for all concerned.

Time warns me, Sir, that I must bring my oration to a close lest I weary you with commonplace remarks upon a subject that is now dominating all professional minds and has been many times dealt with by abler pens than mine. None the less it is a subject of surpassing interest to us physicians, and it is from this point of view alone that I have attempted to deal with it. Upon our surgical colleagues must I throw the burden of so improving their manipulative skill that they shall be able to render with the minimum of risk the maximum of relief to those patients in whose cases we have to

* "Differential Diagnosis," Macmillan and Co.

confess that drugs are useless. We can only point out to them a gross lesion; it is for them to devise the best measures to remove it. I must conclude by wishing that we could realise the joy and delight with which our respected godfather would hail the results already accomplished and how eagerly he would lead the van for improvements to come.

OCTOBER 11th, 1899.

Dr. A. Ernest Sansom delivered the Hunterian Society's Lecture on

"THE EFFECTS OF INFLUENZA UPON THE HEART AND CIRCULATION."

A full report will be found in the "Lancet" of October 21st, 1899.

OCTOBER 25th, 1899.—Clinical Evening.

MALIGNANT DISEASE OF LUNGS AND PLEURA.

Case shown by Dr. F. J. Smith.

A man, æt. 19. Illness commenced nine weeks previously with pain in the chest but no cough. On admission to hospital he was thought to have pleurisy with effusion on the left side, and a needle was inserted with a negative result. Systematic examination revealed enlarged glands in the neck, above both clavicles, and one or two tender lumps on the ribs. These, with the signs of something solidifying or compressing the left lung, rendered a diagnosis of malignant disease nearly certain.

Dr. Smith drew attention to the differential points of diagnosis between pleuritic effusion and new growth, and remarked on the youth of the patient and the complete absence of anything likely to be causative of the condition.*

ABDOMINAL ANEURISM.

Case shown by Dr. F. J. Smith.

The patient, a man æt. 45, had been sent to him for diagnosis. He had complained of great pain in the lower

* The diagnosis was confirmed by the death of the patient a fortnight later.—Ed.

part of the left chest, especially after food, for some two or three years.

Examination revealed a fluctuating and pulsating swelling just under the left ribs, over which a distinct systolic bruit could be heard. There was no history of syphilis. Dr. Smith remarked that he had little doubt the case was one of aneurism of some branch of the cœliac axis, probably not of the axis itself, or of the aorta, for the physical signs were not sufficiently obtrusive considering the duration of the symptoms.

EXOPHTHALMIC GOITRE (MALE).

Case shown by Dr. F. J. Smith.

A schoolmaster, æt. 40. He had noticed symptoms about eighteen months. The enlargement of the thyroid, the prominence of the eyes and the tremors were all very marked. Dr. Smith said he had tried injections into the thyroid of Calcium Chloride in the hope of causing the gland to contract, as he believed that the gland was the exciting cause of the other symptoms.

EXOPHTHALMIC GOITRE.

(Complete recovery after ten years.)

Case shown by Dr. Arthur Davies.

M. T., single, female, æt. 24. Symptoms began at 14. Enlargement of thyroid, prominence of eyes, marked palpitation and hysteria. She underwent various methods of treatment in hospitals, e.g., Leiter's tubes for several months, electricity for four months, but without benefit. Since 1892 she has been under various medical men at different times. She states: "I cannot say whose treatment was effectual, but during the last six years I have gradually recovered."

Dr. Davies pointed out that the patient does not present any signs of exophthalmic goitre, with the exception of very slight exophthalmos. The heart's action is quiet and regular, the pulse rate being 80 per minute. There is no perceptible enlargement of the thyroid gland.

INJURY TO THE MEDIAN NERVE.

Case shown by Mr. Barnard.

Patient broke his left humerus just above the elbow early in April, 1899. It was placed in splints in the usual way and united well. When the splints were removed six weeks afterwards it was noticed that he could not use the left thumb and first finger.

Present condition showed (1) Paresis of flexor longus pollicis, flexor profundus to left index finger; (2) Left thumb and index are cold and polished, and the nails clubbed; (3) All the small muscles of the thumb are normal; (4) Anæsthesia of palmar surface of thumb, index and middle finger; (5) Bony prominence just above the elbow.

Other cases were shown by Sir Hugh Beevor, Drs. F. J. Smith, Cotman and Ross.

NOVEMBER 8th and 22nd, 1899.—Ordinary Meetings.

INTRODUCTION TO THE DISCUSSION ON THE TREATMENT OF TYPHOID FEVER.

By Dr. G. Newton Pitt.

Mr. President,—In introducing the discussion this evening, I do not propose to attempt to cover the whole of the ground, for this would be impossible with the time that is at our disposal. I would rather propose to say a few words about the more debateable matters, and to bring forward some of those on which there are still differences of opinion, with a view of eliciting the experience of the Fellows of the Society; some of those who are here to-night will be able to give us the conclusions which they have drawn from their very large experience.

From time to time statistics are published showing the excellent results which have been obtained in a series of

cases by adopting a particular method of treatment. This has been repeatedly so with regard to the cold bath treatment inaugurated by Brand many years ago. It was stated that the mortality was by this means reduced to less than 7 per cent., and in one group of over 1,200 cases, the mortality was less than 1 per cent. It has been found, however, that in hospitals in Germany, where the treatment has been carried out systematically for many years, this low mortality is not constant, and in recent years in some of the hospitals the results are no better than where other methods have been adopted. It is essential to remember in discussing the results of treatment, as judged from statistics, that the mortality in different epidemics varies greatly. This is shown by the following figures:—

Metropolitan Fever Hospitals, 17 per cent.
Monsall Fever Hospital, 17 per cent.
Maidstone Epidemic, 7.5 per cent.
Guy's Hospital, 14.3 per cent., but varying enormously in different years. These variations are not the result of any especial treatment.

Table of cases of Typhoid admitted into Guy's Hospital with mortality and number of relapses.

	No of Cases.	No. of Deaths.	Percentage of Deaths.	No. of Relapses.
1885 ...	21	5	24	
1886 ...	21	5	24	9
1887 ...	32	6	19	
1888 ...	37	6	16	7
1889 ...	31	2	6	6
1890 ...	30	5	16	6
1891 ...	40	5	12	3
1892 ...	31	3	10	7
1893 ...	58	12	20	8
1894 ...	90	15	17	14
1895 ...	107	6	6	18
1896 ...	67	10	15	8
1897 ...	55	9	16	4
	620	89	14·3	90

Early Confinement to Bed.—One of the most important rules to be insisted upon in the treatment of a case of typhoid

is never to allow a patient with typhoid to travel or undergo any fatigue. The earlier a patient takes to his bed the better; and even, when a patient is in a remote country village or abroad, it is far better to keep quiet than to travel in order to obtain the best possible attention elsewhere. I could give many examples in illustration of this. A ship's engineer was taken ill and was put ashore at Genoa, and it was thought he might have typhoid fever commencing, although he was not very ill. He decided to come home to London at once; I saw him on his arrival, he was profoundly ill and died within a week of cardiac failure. A few years ago one of our students on a visit to Hastings found that he had developed typhoid; he was not extremely ill, and was allowed to come to town. His strength rapidly failed, and he died within a few days. Sir W. Jenner used to say that "Travel makes what would otherwise have proved a mild case severe, and to cause a bad case, which might after perhaps a struggle have ended favourably, to terminate in death." Liebermeister also insisted on the same lesson.

The patient should be kept in a large airy room with the temperature between 60° and 65° F. There need be no fear while his temperature is high that he will catch cold. During the daytime a sheet and thin blanket over him, with a blanket or a hot-water bottle at the feet, will often be sufficient. As his temperature falls there will be need for more clothing.

At the London Hospital it has been the custom to hang ice-bags in cradles over the patient, and doubtless some of the staff of that hospital will give us the results of their experience.

Diet.—The main staple diet is still two to three pints of milk daily, every two hours in divided feeds, each diluted with 2ozs. of barley water, and most patients cannot take more without passing undigested curds in the motions. When the patient is apathetic, the tongue dry, and the temperature high, they will benefit much more by being allowed to drink freely of water or barley water than if food is pressed. If more nourishment is required, albumen water, custards, jellies, meat juices and essences, and chicken or veal broth

may be given, but this is the limit of what is usually allowed during the pyrexial stage. Dr. Barrs, of Leeds, however, has raised the question whether solid food should not be given before the temperature is normal, if the patient is genuinely hungry and the tongue is not foul. He has carried out the treatment in thirty-one cases, of which three were fatal and only two relapsed. He commences with minced meat.

There is no question that many cases which have taken solid food have done well, but the consensus of opinion at present is still in favour of keeping to the fluid diet while the temperature is raised, and for a few days afterwards. My own rule is to commence to increase the diet as the temperature approaches the normal, if the patient has a clean tongue and complains of hunger, as in such cases their power of digestion has probably returned.

Dr. Samuel West has pointed out that when the diet is changed sometimes the excretion of urea may run up suddenly from 1.5 to 4 per cent. and then drop suddenly again to 1.5 per cent.

1. *Methods of Combating the Pyrexia.*

   (*a*) Cold baths.

   (*b*) Continuous immersion in a tank bath at a temperature of 90 degrees to 98 degrees F. for some weeks, as practised by Dr. Barr, of Liverpool.

   (*c*) Raising the bedclothes from the patient with a cradle and keeping bags of ice beneath the cradle continuously.

   (*d*) Antipyretics.

(*a*) Fifteen to twenty years ago, when the cold bath treatment was first introduced into this country by Dr. Cayley, the nurses and students in our medical wards were kept constantly busy administering baths four and five times daily to each patient with typhoid. Gradually the practice became less and frequent, and of recent years but very few patients have been bathed, and then only very occasionally for a very high temperature which persisted for some hours. Unfortunately we cannot tell beforehand which cases will develop a severe pyrexia, for which frequent bathing might

have been beneficial if it had been started from the onset. There is great difficulty in administering the baths when the patients are scattered about, one or two to each ward, as is done at present; and it necessitates that a large number of patients should be bathed, who would have progressed as favourably without, in order that a small fraction may receive the benefit. Moreover, the relapses are more frequent, while the duration of the pyrexia is practically not shortened, being twenty-four days for expectant treatment and 23.3 for those bathed.

The question has, however, been again brought to the fore by the statistics published by Dr. Osler, and also those by Dr. Hare, of Brisbane. Dr. Hare reports:

(A) 1,828 cases treated with expectant methods between 1882 and 1886; mortality 14.8 per cent.

(B) 1,902 cases treated systematically with cold water baths, between 1886 and 1896; mortality 7.5 per cent.

Percentage of Fatal Cases from	A.	B.	Guy's Hospital Cases.
Perforation	2.9	2.9	4
Hæmorrhage	1.88	1.2	.8
Pulmonary	2.22	.51	3
Cerebral	·68	.17	
Exhaustion	6.83	2.9	3

Among those bathed death from perforation and hæmorrhage is twice as common in men, as in women.

Cases of		With Constipation.	Loose.	Diarrhœa.	Severe Diarrhœa.
Perforation	28	18	7	11	4
Hæmorrhage	13	—	6	4	3

These complications, therefore, both occur more frequently with diarrhœa. Murchison showed that perforation occurred in 3 per cent. of all the cases, and in 20 per cent. of the fatal cases.

All experience shows that the number of deaths from perforation and from hæmorrhage are not materially affected by treatment, whether it be expectant, by antiseptics, or by bathing, but the number of deaths from pulmonary com-

plications and from exhaustion appear to be markedly fewer among patients who are systematically bathed.

I have for the purpose of comparison collected together all the cases of typhoid fever that have been under treatment in Guy's Hospital during the years 1885 to 1897 inclusive. These amount to 620; in 90 there has been a relapse, i.e., in 14 per cent.; 89 died, i.e., 14 per cent.; but 26 died within a week of their admission, and they would almost certainly have been fatal under any line of treatment.

Series of cases of typhoid treated at Guy's Hospital between the years 1885 and 1897, but few having had cold baths. The cases of death due to the following causes were:

	Total.	Within one week of admission.
Perforation	26 ...	9
Broncho-pneumonia... ...	17 ...	5
Exhaustion	19 ...	6
Hæmorrhage	5 ...	2
Peritonitis without Perforation	4 ...	1
Hyperpyrexia	2 ...	—
Surgical Kidney	2 ...	—
Sloughing Gall-bladder ...	2 ...	—

Pulmonary embolism, empyema, and tuberculous nephritis also each caused one death. The following were each the cause of one death within a week of admission; membranous enteritis, necrosis of the larynx, fibroid heart, purpura, hydatid of the liver, cirrhosis of the liver, and old heart disease.

The mortality during the whole period between 1885 and 1897, of the cases in Guy's Hospital, has varied greatly in different years, the extremes being 6 and 20 per cent., illustrating the danger of generalising from only a small number of cases. Still the mortality has shown no steady decline, and is for the whole period higher than that given by both Drs. Hare and Osler, but for the years 1889 and 1895 the mortality is less than theirs. The type of the epidemic is the main factor in determining the rate of mortality.

If we put on one side the cases which proved fatal within a week of admission, and the cases of perforation, peritonitis and hæmorrhage, which are not reduced in number by the

cold bath treatment, there remain 27 who died from exhaustion, pulmonary inflammation, or hyperpyrexia, i.e., 4 per cent. of all the cases might have been benefited by the bathing, and, judging by Dr. Hare's results, possibly 18 more might have survived if all the patients had been bathed. It would appear that if this treatment had been universally adopted, each physician might have saved one patient every third year. The trouble and labour of the bathing is obvious, and it is comprehensible that the beneficial result occurring at such infrequent intervals has been lost sight of. It seems clear, however, that a further trial should be given to systematic bathing, but apparently all the good results can be obtained without putting the patients in water colder than 85° F., and it is not necessary to rub them with ice, as was formerly done, so that the process will be much less disagreeable. It is noteworthy that in Paris it has been found that when patients struggled and objected to the baths, there was not the same beneficial result as with those who had not objected. It is probably also sufficient if the bath is given when the patient's temperature is above 103° F. at intervals of not less than every three hours.

(*d*) Antipyretics, such as phenazone, phenacetin, and acetanilide, are now much less used than formerly; they are certainly injurious when given in large doses for a prolonged period with a view to keeping the temperature persistently near the normal; when given occasionally they may be permissible. Quinine in two grain doses, especially in an acid mixture every four to six hours, is often given.

Thallin should be avoided, as in my experience it, among other disadvantages, gives patients a great disgust for food, so loathesome is its taste.

Antiseptics.—It has been shown that in many cases the toxæmic condition is partly due to the poisons elaborated by other organisms besides the Eberth's bacillus, which during the illness flourish in the alimentary canal, more particularly the Bacillus Coli, which becomes much more virulent. The number of antiseptic substances which have been recommended in order to counteract this condition is innumerable, which indicates that none of them have yet been recognised as markedly superior to the rest. Among those which have

been most used are: carbolic acid, one to two grains in chloroform water; thymol, two grains in a gelatine-coated pill; liq: hyd: perchlor: in half-dram doses; a mixture containing chlorine; spirit of turpentine; salicylate of quinine; salol; creosote; peroxide of hydrogen, and many others. They do not abort the disease, and although many cases benefit by their use, in others they diminish the patient's appetite and do more harm than good. When the motions are very foul and the abdomen is distended with gas they are specially indicated.

In the published reports of cases most of them are credited with the power of enabling the patient to keep a moist tongue during the course of his disease; after a considerable use of most of them I have come to the conclusion that none of them are of sufficient value to require their continuance, if they in any way interfere with digestion or otherwise upset the patient.

Andreivsky has treated 71 cases with a mortality of 2.82 per cent., giving them two to five drams of calomel during the illness, in five-grain doses, three times a day; yet even such statistics will not commend the treatment to any of us.

Stimulants.—Most cases, except the very slight ones, will, towards the end of the fever, require some stimulant, and a few will need 6 ozs. of spirits. It is but very rarely that as much as 10 ozs. will be required, and then only for a short time. For hospital patients brandy, whisky, or alcohol of the B.P., will be the most suitable form; but for patients who can afford to drink good wine, old champagne, and fine old sherry, are to be especially recommended. The use of the latter is strikingly valuable during convalescence.

Strychnine is of extreme value, but in my experience digitalis does but little to improve a failing heart in typhoid.

Coma.—The state of coma into which patients may pass after a prolonged and severe attack is one that gives rise to grave anxiety. Sometimes it is due to a fall of blood pressure, and may be combatted by giving the patient an abundance of water to drink. In exceptional cases it may be desirable to infuse saline solution into the axilla or into a vein, but the results are generally disappointing.

Often, however, it is due to toxæmia, and for this on

several occasions the beneficial effects of a dose of four grains of calomel (given in one or two doses), first proposed by Sir W. Broadbent many years ago, has been very striking. The profound stupor diminishes, the distension is lessened, and the foulness of the motions, so often present in these cases, is lessened. The condition always calls for stimulants in some form or other, if they are not already being administered.

The remedy which has been of the greatest value in my hands, and which has apparently been the means of saving more than one patient's life, is musk, given in ten-grain doses in milk. The main objection to the remedy is its expense, which is 4s. for each dose, and it is most difficult to obtain efficient and unadulterated specimens.

I may quote two cases: A nurse with a very severe attack of typhoid, gradually passed into a state of coma, with extreme cardiac failure. The temperature had not been unusually high, but the diarrhœa was severe, and was not checked by treatment. In spite of stimulants in large amounts she appeared to be steadily sinking. The effect of musk on her pulse was remarkable, and after a week of extreme gravity, during which she was taking musk in ten-grain doses three or four times a day, she finally turned the corner and recovered.

She was practically unconscious for over two weeks, and had no recollection of events for a still longer period. She was one of the worst cases I have seen recover, and this was apparently largely due to the musk.

A medical student infected himself with typhoid at an oyster supper in Dublin, several others of the party falling victims at the same time. He had an extremely severe attack, and in the third week lay in a state of semi-coma with a barely susceptible pulse. Musk was administered to him, but without any appreciable effect. We were, in consequence, uncertain about the efficiency of this specimen, and procured some from Messrs. Allen and Hanbury, who had supplied the previous patient. The stimulating effect of this was now evident on several occasions. The coma was also diminished by a dose of calomel, and finally, after a very prolonged period of unconsciousness, over six weeks, he recovered.

Infectivity of the Urine.—Dr. Horton Smith, in 1897, drew

attention to the fact that while typhoid bacilli are not present in the urine in the earlier stages of the disease, they are often passed in enormous quantities after the second week, and during convalescence. Wright and Semple, however, came to the conclusion that they can also be found as early as the first week. During the past few years we have noticed the great frequency with which incontinence of urine was present, and that this often continued when the patient's condition was not otherwise unsatisfactory. Incontinence has appeared much more frequently than cystitis, which was the condition Dr. Horton Smith noted. The presence of this irritability of the bladder is possibly explained by the excretion of the bacilli by the kidneys. Occasionally a few pus cells are present in the urine, and in two cases the patient died with suppurative nephritis.

Slight cystitis, with frequent micturition, has been said to persist sometimes for a few weeks. Not only are these symptoms troublesome, but the danger of infection spreading by means of the urine is not to be overlooked. That the urine of a typhoid patient is infectious to man was unfortunately proved by the following case. A sister of a ward under Dr. Petruschky's care drank by mistake some urine which had been passed by a typhoid patient into a wineglass. After an incubatory period of twelve days she developed typhoid fever.

Ten grains of urotropine twice a day for a short period often, but not always, suffices to sterilize the urine and puts a stop to all symptoms of bladder irritability. It is, therefore, desirable that this drug should be admistered to all convalescents from typhoid for at least three days in order to diminish the risk of infection by means of the urine.

Dr. Richardson has also reported nine cases in which there were typhoid bacilli in the urine which disappeared when urotropine was administered.

Profuse Diarrhœa.—Antiseptics, especially salicylate of bismuth, or carbolic acid, are indicated, or an enema of starch and opium, or opium by the mouth with sulphuric acid and an astringent, one of the best of which is tannigen, in eight-grain doses, after each liquid motion.

Irrigation of the colon with a hot saline solution is also invaluable at times.

Tympanites.—Enemata of turpentine, or the introduction of a long rectal tube, the administration of creosote, or turpentine by the mouth, and the application of an icebag to the abdomen are indicated. Sometimes strychnine will succeed when other drugs have failed.

Hæmorrhage.—In these cases there is a mortality of 35 per cent. according to Dr. Hare's figures, but this is certainly higher than has generally been met with. When severe, stop all milk, and feed on whey, albumen water, and meat juice, or on pre-digested food. Give at once a large dose of opium (a drachm of the tincture), either by bowel or by mouth and keep absolutely at rest. I doubt the value of any astringent administered by either mouth or rectum. Sp Terebinth, m 10, by the mouth every four hours is recommended by some. Ergot, it is now being recognised, is useless as a hæmostatic, except for uterine hæmorrhages. It is difficult to see what benefit can be obtained by putting an icebag on the abdomen, except to give the patient an additional reason for keeping quiet, and possibly to diminish distension should it be present.

To avoid for twenty-four hours the administration of any food that will produce fæces, and to keep the patient well under opium, form the two essential factors; fortunately it but rarely happens that the hæmorrhage comes from a large vessel. We have only had five fatal cases from hæmorrhage in ten years.

Perforation.—Under expectant treatment this is almost always fatal, but I have seen two cases, which had peritonitis, apparently from perforation, recover.

At the present time, if the diagnosis can be made while the patient is at all in a fair condition, laparotomy, as soon as the patient has recovered from the initial collapse, offers by far the best prospects, but not 25 per cent. of those which have been operated upon have recovered.

Vaccination.—It is early yet to judge of the value of vaccination against typhoid as a prophylactic; when the disease has developed, it has no value, but that in the future great benefit will be obtained by the use of an antityphoid serum is probable.

Dr. Fred J. Smith said both Dr. Pitt and the Society were to be congratulated on the excellent and suggestive paper just read. In reply to the direct question I believe that the method of covering the patient with a thin sheet only, over a cradle with hanging ice pails, was peculiar to Dr. S. Fenwick, and when he left us it was allowed to drop out of the routine of the hospital. With regard to the diet of typhoid patients I hold rather strong and possibly very unorthodox views, they are these, viz., that while the patient has a foul, dry tongue, with sordes on the lips, and while he is indifferent to food the less he has of food the better; my own plan is to give, under such circumstances, absolutely nothing but water in as large a quantity practically as the patient will drink. So soon as the tongue cleans and the wind clears so that the patient consciously asks for food I have no hesitation in allowing them small quantities of pretty nearly anything, e.g., stale bread and a lightly boiled egg, custard, jelly, even a little finely minced meat, totally irrespective of the temperature, which is in this particular quite a fallacious guide, and I maintain that we gain nothing and lose a great deal by waiting for a normal temperature before feeding the patient with small quantities of any softish food. My argument runs thus—the filthy condition of tongue and palate, with the apathetic mental condition is an indication of a cessation of digestive action on the part of the stomach and intestine, and that therefore to give food in this condition is not only a sheer waste of such food (here let me say that it is a distinct duty of the medical man to see at least one stool every day or every other day, and to examine it carefully by washing it through with large quantities of water so as to appreciate with the naked eye qualities of its constituents, which will be found at this time to be almost entirely food debris, curds of milk, etc., which has passed through the intestine without undergoing any attempt at digestion. I make it a strong point with students to personally instruct them how this washing through should be done) but also adds enormously to the dangers of toxæmia by filling the intestines with a slowly moving mass of decomposing and fermenting material likely enough to cause troublesome if not dangerous distension. Therefore withhold food, except water, entirely in the early stages, or rather when the disease has taken a firm hold of the patient and stopped his digestive processes. That this deprivation of nutrition will cause any deleterious effects in the way of weakening the patient I do not believe, and that for the reason given above, viz., that he makes no use of what we do give him. Then, to continue the argument for giving food at once on the demand of the patient. I hold that inclination for food under such circumstances means a restoration of functional capability on the part of the

stomach and upper intestine both for digesting and absorbing nourishment, and is therefore a strong indication to us to give that nourishment. It may be objected that this feeding will be dangerous by reason of the active peristalsis that ensues. My reply is first, that we would not if we could, nor could we if we would, stop peristalsis, nor can we keep the bowel empty even if we can get it empty; if, therefore, peristalsis must go on, I cannot conceive how we can do wrong by allowing it to move along the intestine a soft pultaceous mass of nutritious food, and I am sure that, once the stomach has shown renewed activity by return of appetite, none of the food stuffs I have mentioned, even including shredded or ground (once or twice through a sausage machine) meat will leave that organ in any other condition than as a soft, pulpy mass or even liquid. Further, with such a soft mass to deal with, peristalsis cannot, I take it, be so violent as to deliberately cause either perforation or hæmorrhage. Apart from this theoretical idea, I may point triumphantly to the fact that both these accidents occur now and then to the most rigid disciplinarian in the way of diet. So much for diet; but I cannot refrain from a word of caution about milk. The laity, and I fear too often even the profession, considering that milk is a liquid diet, are too careless in its administration; they will give, or allow to be given, as much as two or even three ounces of simple undiluted milk, with the result that a big lump of curd forms very rapidly in the stomach, a lump which causes infinite trouble to that organ, and in some cases leads even to its ejection by the mouth, with serious risk to the patient. I would add that when a typhoid patient, after say the third or fourth day, vomits, the fault lies with the treatment in all probability, and means that food has been administered when the stomach was powerless to digest it, or even to deal with it in any other way than by vomiting. If milk must be given, and I admit we can hardly do without it, let it invariably be given never more than one ounce at a time, and always with at least an equal quantity of lime or barley water; or, what I consider the perfect way, let it be curdled first with rennet, then the curd broken up finely by being squeezed through coarse muslin and let an ounce of this (broken) curds and whey be administered every hour or so.

Relapses are said to occur as the result of too early solid feeding, that they occur *after* the first solid feed I must allow, at least amongst those cases which are allowed no solid food till the temperature has been normal for several days, but I demur entirely to the deduction of cause and effect. I cannot claim any great freedom from relapses, nor do I think that I have more than my share with my system of treatment; but this I can say, that under my system

they certainly are not the *result* of solid food, for nearly all get some solid feed while still pyrexial, and the temperature continues to fall in spite of it and then goes up again whether I feed them or not.

With regard to Dr. Pitt's remarks on disinfecting stools, or rather on the utterly fallacious idea that we do in practice really disinfect them, I entirely agree with him. Certainly, wherever possible, the stools should be passed into tow or sawdust and burnt—there is no disinfectant that can approach fire in efficacy.

With Dr. Pitt's remarks on drug treatment I am almost in entire agreement. My own plan, carried out on a fairly large number of cases now, is to give the patient one grain of calomel night and morning throughout the disease, and frequently they get no other drug whatever. Whether this acts by its antiseptic powers, or by its influence on hepatic functions, I am unable to say. I used to try more direct antiseptics, such as naphthaline, salol, and chlorine water (by the way, this water was administered long before Dr. Burney Yeo), but have now practically discarded them all for calomel. Antipyretics of coal tar origin—antipyrin, antifebrin, etc.—I regard as dangerous drugs without a redeeming feature in typhoid treatment, and rely entirely for reducing temperature upon cold sponging or a warm (not cold) bath. For perforation, when that fearful incident occurs, we must either let the patient die with what mitigation of his suffering hypodermics of morphia will afford, or we must get a surgeon to open the abdomen, a procedure which has saved several lives otherwise inevitably doomed.

For hæmorrhage, too, we must I fear rely solely upon opium, pushed freely to obtain mental rest, an icebag to the abdomen, and upon the most absolute bodily rest; it is an accident, the prognosis of which is, I believe, much more favourable than is usually assumed. Direct styptics or astringents are, I believe, useless in all cases except when they are harmful; they cannot reach the bleeding spot in a condition capable of plugging the vessel, and ergot and its congeners of similar action cause an increased strain on the bleeding vessel. If a large artery is opened death, I believe, is inevitable; if only small vessels are oozing, the above simple treatment will suffice.

Diarrhœa of sufficient severity to call for treatment, i.e., more than twelve actions per diem, must be very rare, and my experience in the post-mortem room teaches me that it means colonic ulceration, and as such would I think (I have scarcely seen a case yet) be best treated by large (two to three pints) enema of a hot astringent solution, e.g., argent nit 1 grain to 1 ounce.

Constipation is with me a much commoner and more to be dreaded

incident in the disease, for this I have now no hesitation in increasing temporarily the dose of calomel, and following it on with sulphate of soda, three grains for a dose in warm water every three or four hours, till looseness of the bowels is again established.

Such, sir, are I consider the main general lines of treatment in typhoid, but I cannot emphasise too much or too strongly the view that each case of typhoid must be treated on its own lines; each case that is severe will show by its own indications as to the direction in which danger threatens, now pyrexia, now toxæmia with heart or lung trouble, now severity of ulceration with threatening perforation and hæmorrhage; and while I believe that my calomel treatment, with a policy of masterly inactivity, is the best for all mild cases, I assert that for all severe ones we shall have to adopt measures varying according to the special needs of the case. Only a well thought-out and early applied antitoxin treatment can offer a constant routine treatment for all cases, and I believe that such will eventually be found, and that when found it will be as efficacious as has the antidiphtheritic serum already proved itself.

At our last meeting I promised to give my small share of statistics; the numbers are small, but such as they are I give them fearlessly and hopefully; they have been compiled for me by Dr. L. A. Smith, our Medical Registrar, without any picking and choosing, and include every case that has been under my care from 1893 to 1898.

In the earlier years, 1893, 4, and 5, I was still very largely under the influence of the teaching of text books, with the following result:—119 cases gave 26 fatal cases, a mortality of 21.84, which is above the average; the deaths were due to

Perforation	9
Hæmorrhage	4
Toxæmia, either general cardiac or pulmonary	10
Laryngeal ulcer	1
Peritonitis without perforation ...	1
Diarrhœa	1
	26

During 1896, 7, 8, dissatisfied with the older plans, I acted on what I believed to be sounder principles of drugs and diet as indicated above; my numbers for those years were 79 cases with 11 deaths, a mortality of 13.9, showing a considerable diminution, though not yet down to the figures quoted by Dr. Pitt. These 11 deaths were due to:—

Perforation	...	...	...	4
Hæmorrhage	...	...	...	1
Toxæmia	...	...	...	4
Septic metritis after miscarriage			...	1
Septic arthritis, doubtfully enteric			...	1
				11

It would, perhaps, be fair for me to claim this as the result of my plan of treatment, but candour compels me to state that though the figures are accurate enough, the deaths are so distributed as to lead me to believe on close inspection that chance had more to do with them than the calomel or feeding. To analyse them closer I should have to write a much longer paper than is possible now.

The relapses amongst the 119 cases were only seven, whilst among the 79 cases there were nine. This, in a similar way, tells against me, but the argument is very much weakened by the fact that during 1898 I had not a single relapse out of 21 consecutive cases. I can only thank you, Sir, for the indulgence with which you have listened to this long statement.

Dr. Ewart dwelt upon the treatment originally advocated by Mr. Wedgwood, of Kings Lynn, which he had used for several years with most satisfactory results as regards improvement in the general state and the symptoms, freedom from relapse, and a rapid convalescence. All cases, except those of the unamenable group, and occasionally a severe case, emerged from the typhoid state with a clean tongue, a clear intellect, and appetite and capacity for food within a few days after taking the remedy—Liq. Hyd. Perch m xx, Tinc Ferri Perch. m xv-xx, Syr. Aurant. dram 1, Aq. ad one ounce sextis horis. This is begun at the earliest opportunity after an initial purge, and continued uninterruptedly throughout and for ten days after defervescence. There may be, perhaps, though this is an obscure point, some value in the hydrochloric radicle; but the value of the metals is not open to doubt. The iron acts as a tonic, a hæmatinic, a styptic, and an astringent. Diarrhœa is invariably, except in the unamenable group, lessened or stopped; and laxative foods or glycerine enemata frequently become necessary. The mercurial solution may also be regarded as a suitable application, even more so than the ferric solution, for an ulcerated surface. The recurring dose of mercury continued for weeks may perhaps not be denied some antiseptic action in the bowel. But the speaker was not a believer in chemical antiseptics "in vivo." We should rely upon the too little thought of antiseptic of nature, the bile, and endeavour to get the full advantage from it. Prolonged

dorsal decubitus, total absence of mechanical stimulation of the liver, and the loss, owing to the fluid diet, of the usual stimulation of the duodenal papilla, are difficulties inherent to the approved lines of nursing, but they are fortunately easily got over as soon as realised. He regards the early and conspicuous efficacy of Wedgwood's treatment as probably due to the cholagogue action of the mercury, though this is by no means the only mode of action of the latter. The greatest of all recommendations is that the patient is able to take food at an early date and to digest it. There is no object in giving the bulky food of the mixed diet in the solid form; but the best nutritious principles supplied by Nature, including, of course, the vegetable group, are clearly needed in a tissue wasting disease such as typhoid, and should be supplied liberally, with due discretion, as a safeguard against, and as a remedy for tissue starvation and its results—perforation, vascular rupture, and septic repullulation, i.e., relapse. The earliest indication is for the carbohydrate group as muscle food to keep the muscular system, which seems to be most drawn upon for fuel, well supplied with carbohydrates. Maltine, or where constipation exists, honey, sugar itself and chocolate are available for this purpose, in addition to strong beef tea and milk, and sometimes cream if well borne. Jellies, beaten up eggs, subsequently boiled eggs, raw meat juice, the juice of grapes and oranges, baked apples and carefully prepared vegetable soup are early instalments in the dietary which may be further added to if there should be any evidence of wasting. The use of alcohol is entirely exceptional in his practice, but port wine or claret is prescribed as soon as the pyrexia has ceased. He had not used the serum or the antitoxin treatment, which would seem to be our only hope of dealing principally with the now incurable cases. He has not found any cause to resort to bathing, the results being entirely satisfactory without it; but the sponging twice daily, which is a regular part of the treatment, may be used with greater frequency and with colder water if the temperature should be high. Great comfort is also derived from a small ice pillow to the nape, from which the water is drained off at the sides. High irrigation of the colon has been tried in a severe case with only temporary relief. The objection is the unavoidable exertion and danger of exhaustion to the patient. In hæmorrhage, something may be said for the local application of ice; if the bowel could be made to contract hæmorrhage would probably cease. It is not the contraction, as often thought, but the distension of bowel which is so great a danger both as regards perforation and hæmorrhage. With a view to lessening the risk of distension of the paralysed cæcum, which tends to be filled with the fluid fæces and with the gases evolved from them,

he has for some time past adopted the precaution of raising the right side of the patient by a pillow wedged under the mattress under the right hip. This leads to the disappearance of the fluid accumulation from the cæcum, and to the transference of the dulness arising therefrom to the left iliac fossa. This position can be so arranged as not to be a source of inconvenience to the patient; and in keeping the ulcerated surface from being soaked in acrid and toxic fluids it would seem to fulfil a rational indication.

Dr. Glover Lyon said that three years ago the cold bath treatment was universally used in Montreal as it was thought no means should be neglected that was proved to reduce the mortality due to the disease. He thought that no cases should be treated out of hospital unless facilities for cold bath treatment were available.

Dr. Arthur Davies referred to the value of the use of Perchloride of Mercury, given internally in typhoid fever, which he considered almost as a specific. He had used it many years with satisfactory results. He also deprecated the too early return to solid food.

Dr. E. W. Goodall said that for some months past they had been treating their enteric cases at the Eastern Fever Hospital with a modification of Brand's method. When the patient's temperature rose to 102.2 degrees F. he was placed in a bath of water at 75 to 80 degrees F., instead of 68 to 70 degrees F., as employed by Brand. Hare, of Brisbane, had shown that this modified method was as efficacious as the strict Brand's treatment. Collapse occurred less frequently, in fact one could say rarely; and fewer objections were made by the patients. The number of baths varied from two or three to fifteen or sixteen in the twenty-four hours; and the duration of each bath from five to twenty minutes. The result of the treatment was to lower the temperature, abolish or lessen delirium, induce sleep, stimulate the heart, and render the tongue and mouth cleaner.

With respect to the operative treatment by a purification of the intestine, he quite agreed that this measure should be carried out whenever there was the slightest chance of success. Unfortunately, at the present time, enteric fever in London was of a severe type, and cardiac depression was a marked feature in most of the cases. Consequently the patients rarely rallied sufficiently from the collapse caused by the perforation to allow the surgical interference.

DECEMBER 13th, 1899.—Pathological Evening.

HYPERTROPHIED APPENDIX VERMIFORMIS.

Specimen shown by Dr. Hingston Fox, in conjunction with Mr. Charters J. Symonds.

A man aged 30 years, thin and not robust, three of whose brothers had lung trouble, had been working as a missionary in India (Central Provinces) for six years. Near the end of this period, and on three occasions since his return to England, he suffered from brief attacks of catarrh of the appendix cæci. He was generally confined to bed about three days, the temperature once reached 102.4 degrees, and there was pain and tenderness in the right iliac fossa, where a small mass was to be felt. He proposed to return to India, but as there was a small hard, pipe-like mass, not tender, to be felt midway between the iliac crest and the umbilicus, and parallel with the crest, he was referred to Mr. Symonds for operation.

The appendix was found situated behind the cæcum, and directed upwards and outwards; its end was greatly dilated, and abruptly flexed upon it, like the bowl of a tobacco pipe. This abrupt flexion constituted a stricture of the tube, and the distended end contained some semi-puriform fluid. The whole of the organ was removed, and the patient recovered perfectly, and left England, I believe, yesterday, for India to resume his work.

Several points of interest in this specimen may be noted. One is the advanced state of disease of the appendix, although the four attacks of catarrh had been slight in character. The decision to submit the patient for operation was partly based upon his prospect of return to India; had he been intending to remain in this country the surgeon's aid would probably not have been invoked at present. But there can be little doubt that an appendix in such a condition ought to be removed. A further inflammatory attack might have led to troublesome adhesions if it had no worse result. The absence of tenderness was also noteworthy. The case seems to indicate that when there have been well

marked, if slight, attacks of appendix catarrh, and a mass is to be felt at its site, removal of the organ is necessary.

INFECTIVE ENDOCARDITIS.

Specimen shown by Dr. Hingston Fox.

Dr. Fox exhibited the heart of a man aged 39 years, attended in conjunction with Dr. E. A. Lermitte, of Stamford Hill, the subject of infective endocarditis of about four months' duration.

The case belonged to what has been termed the cardiac or malarial type of the disease, in which the disorder has been grafted on a previous valvular lesion (an aortic systolic bruit was in this case left by rheumatism a year before), and is attended by remittent pyrexia. The source of infection could not be traced.

Staphylococci were found in the blood, but no streptococci, and the staphylococcus pyogenes aureus was obtained from pustules.

The case was of interest therapeutically, inasmuch as Anti-Streptococci serum received a full trial, as did also nuclein, administered hypodermically, but without any advantage.

The only benefit obtained, beyond some from salicylate and alkalies, was from very extensive minute pustulation of the front of the body by means of a German electric oil, apparently containing croton oil or a similar drug, employed by Dr. Lermitte. It was very well borne, and the temperature steadily declined for four days, the patient also seeming in every way more comfortable. There was, however, no permanent benefit.

The heart shows much enlargement, and the left ventricle was much distended and filled with firm dark clot. The aortic valves were distorted and covered at their edges and bases by abundant granulations, and there were some granulations also on the auricular surfaces of the mitral valves. The pericardium contained about four ounces of turbid bloody fluid containing flakes.

The case was recorded in the "Lancet" of 4th November last.

A DOUBLE ANEURISM OF VERTEBRAL ARTERIES.

Specimen shown by Dr. Rawes.

The specimen was taken from a man æt. 35, who was admitted into St. Luke's Hospital on October 7th, 1899.

His father and two uncles had died of phthisis. In early youth the patient had been constantly under medical and surgical treatment. There were evidences of past extensive tubercular disease in the glands of the neck and groins, the right elbow and foot.

He had syphilis about four years ago, and there was tertiary ulceration on the left leg and foot. He had suffered from insomnia for many years. From 1891 to 1896 he had been in the habit of taking chloroform by inhalation. Access to this being prevented he resorted to whisky in large quantities, and had frequent drinking bouts lasting two or three weeks, these alternating with drug taking, principally chloral, paraldehyd and sulphonal. For the last six months at least he had had no sleep without some hypnotic.

Mental symptoms came on gradually; he complained of peculiar and awful dreams, of pricking sensations in the hands and limbs. He wandered about the house at night. Auditory and visional hallucinations developed, and he began to talk incessantly.

He was admitted in a state of dementia. He did not appear to understand anything that was said to him. He muttered incoherently, and was for the most part unintelligible; always extremely restless and at times noisy.

There were no symptoms calling for special mention until October 28th, when he had a slight epileptiform seizure, from which he quickly recovered. On October 30th, at 6 p.m., his condition suddenly altered; he became rapidly unconscious, respirations somewhat irregular and 60 per minute. Pulse very feeble 100. There were no convulsions. At 9 p.m. respiration sank to 30, temperature rose to 101.4, the pulse remained at 100. No valvular disease could be detected in the heart.

The physical signs in the lungs were negative. The urine was free from sugar and albumin. Pupils were equal; there were no ocular symptoms.

October 31st.—Patient only partially conscious. His condition very variable. During the earlier part of the day respirations varied from 25 to 40; pulse continued to be about 100; temperature 100.2. Throat deeply congested, but there was no swelling. The pharangeal muscles appeared to be paralysed, there being no attempt at deglutition, and no reaction when the back of the throat was stimulated.

Later in the day and throughout the night respirations varied from 60 to 80 and were more regular, but had not the character of "Cheyne Stokes." Pulse from 100 to 120, and much weaker; temperature 100.

November 1st.—At 9.30 a.m. respirations again suddenly became more rapid and reached 100 per minute. Pulse 105, weak and very irregular. Temperature 101.2. The patient was quite comatose. The breathing continued very rapid and shallow, and got more and more irregular until he died at 1 p.m.

Post-Mortem Notes.—Heart: soft and flabby, no valvular disease, no aortic disease. Lungs: both bases congested, no consolidation. Old healed tubercular lesions at both apices. Kidneys congested, capsules stripped easily.

The whole inner table of the skull showed syphilitic osteitis. There was enormous engorgement of the cerebral veins, an excess of cerebro-spinal fluid. The brain was soft, deeply congested, grey matter thin. Some wasting of corpora striata and particularly of optic thalami.

The cerebral arteries from the internal carotids showed no naked eye signs of disease.

There was a small aneurism on the basilar artery just before its bifurcation, and a double aneurism on the verebral arteries where they join to form the basilar. The latter was full of clot and appeared to have exerted pressure on the medulla, or at least had so interfered with its functions as to cause the patient's death.

The paralysis of the muscles of deglutition, the attacks of rapid and irregular breathing, the feeble heart's action with nothing in the lungs, heart or kidneys to account for these symptoms, pointed to pressure on the medulla.

Disturbance of the respiratory centre, leading to deficient aeration of blood, venous stasis in cerebrum producing unconsciousness, finally coma and death.

TUMOUR OF MEDULLA.

Specimen shown by Dr. F. J. Smith.

On October 25th he showed the patient, a boy æt. 10, who had been admitted under his care with persistent vomiting. Practically there was nothing else on admission, except that the boy, during his vomiting attacks, assumed a curled-up attitude in bed. During his stay in hospital nothing appeared, and he was discharged apparently well. Within a few weeks, however, he was re-admitted with a relapse, and then Dr. Smith detected fairly definite signs of optic neuritis, and it was while this neuritis was visible that the boy was shown to the Society. Again the vomiting subsided, and the boy showed absolutely no further symptoms, no paralysis of any sort and no headache, and when not vomiting and curled up in bed the boy was running about in the ward. During an attack of emesis, however, he died rather suddenly.

The brain exhibited a tumour about 2in. by 1in. by 1in., situated by the side of the medulla and the cerebellum, apparently involving the inferior peduncle on the right side and a part of the middle peduncle. Dr. Smith remarked on the extraordinary absence of symptoms from a tumour situated so near to vital structures.

KIDNEYS AND BRAIN FROM A CASE OF FRACTURED SKULL.

Specimens shown by Dr. F. J. Smith.

The kidneys (cirrhotic) and the brain (with many ecchymoses) were taken from a man æt. 65, who had fallen and fractured his skull. Dr. Smith remarked on the insidious onset of uræmia in some cases, so that "a fit" and a fall might be the first notice. He drew special attention to the brain, as showing the anatomy of concussion. He believed that concussion was nothing but brain bruising, and that when recovery ensued it meant the bruising was slight; and that the illness and final death in fatal cases illustrated (and were themselves easily explained by) the natural course and terminations (abscess, etc.) of bruises.

Dr. Smith also showed specimens of hæmorrhage in a supra-renal capsule and a peculiar gall-stone.

JANUARY 10th, 1900.—Ordinary Meeting.

CASES ILLUSTRATING VARIOUS CONDITIONS GIVING RISE TO DEAFNESS.

DEMONSTRATED WITH COMMENTS OF CASES.

By Dr. Dundas Grant.

MR. PRESIDENT AND GENTLEMEN.—With regard to the different conditions which may give rise to deafness, I trust you will bear with me, if I remind you for a moment that the organs of hearing consist of two parts—the conducting and the percipient. The conducting part consists of the external meatus, the tympanic cavity with its contents, leading to the internal ear, and it is generally supposed that the percipient part commences with the osseous wall of the labyrinth, but to be exact, it begins with the hairs of the auditory cells. Here then the conducting part ends and the percipient begins.

In disease of the conducting part, we have what is called obstructive deafness; and in disease of the percipient part, whether affecting the hair cells or the auditory nerve in its intracranial extent, the nuclei of the auditory nerves, their intra-cerebral continuations or the auditory cortical centres, we have "nerve deafness."

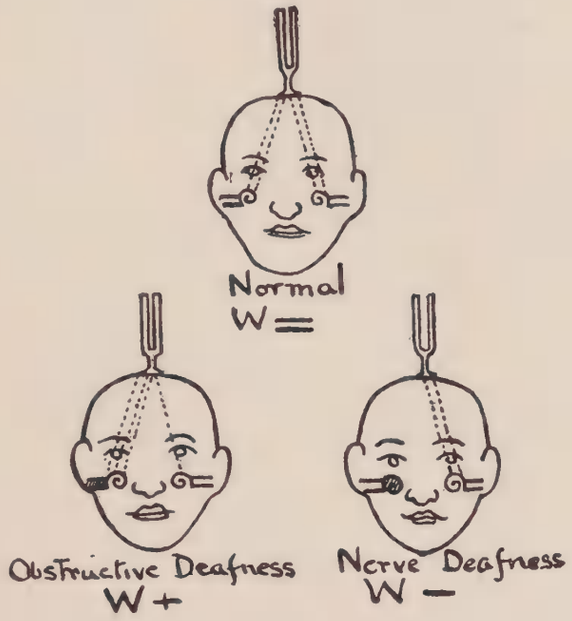
When sound is conveyed from a body vibrating in the air, it is said to be conveyed by "air-conduction" through the tympanic apparatus to the auditory nerve. Sound is said to reach the auditory nerve by "bone-conduction," when it arises from a sounding body vibrating in contact with the bones of the head. These are generally tested by means of a tuning-fork.

Bone conduction is independent of the conducting apparatus, and therefore it is not diminished in cases of obstructive

CONDITIONS GIVING RISE TO DEAFNESS.

PLATE I.

In the following diagrams the number of lines passing from the tuning fork through the bones to the internal ear or through the air to the middle ear are intended to indicate the degree of audibility of the sound. The black shading indicates the site of the lesion as in the conducting apparatus or the internal ear.

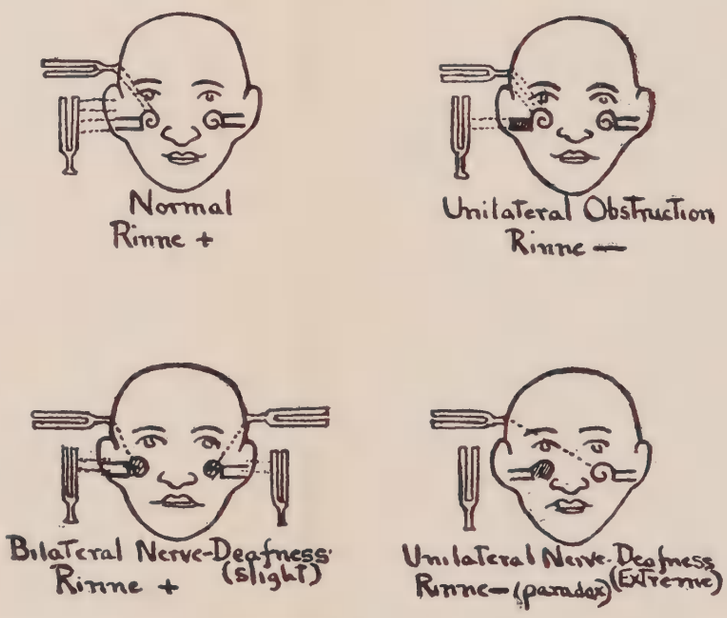


WEBER'S TEST

Fig. A.

In the diagrams of Weber's test (Fig. A.) it will be seen that normally the tuning fork on the vertex is heard equally in both ears, or, as it seems, in the middle of the head. In the case of a unilaterial lesion in the conducting apparatus the fork on the vertex is seen to be heard louder in the affected ear, the opposite holding good in the case of unilateral nerve deafness.

It will be seen that in the normal ear the tuning fork is heard better through the air than through the bone, and Rinne's test (Fig. B.) is said to be positive. In obstructive deafness it is shown that the tuning fork is better through the bone than through the air, and Rinne's test is negative. In bilateral nerve deafness, the ratio of air conduction to bone conduction is maintained and the fork is heard better through the air than through the bone, Rinne's test being, therefore, positive. In unilateral nerve deafness of the highest degree, it may be found that the tuning fork is heard better through the bone than through the air and Rinne's test is, therefore negative, but this is owing to the fact that the air conduction of the affected ear is (as the diagram shows) compared with the bone conduction of the opposite ear ; this may be called a paradoxical negative Rinne and forms an exception to the general rule that a negative Rinne indicates obstructive deafness ; it may be checked, however, by means of Weber's and other tests.



RINNE'S TEST

Fig. B.

deafness, but it is dependent on the percipient apparatus, and is diminished in nerve deafness.

Obstruction leads to a shutting in of the vibrations, therefore to the increase of bone-conduction. A vibrating tuning-fork on the vertex is heard louder in the obstructed ear. If one ear is deaf and the tuning-fork is not heard louder in the deaf ear, then it is not a case of obstructive deafness, but of nerve deafness.

If there is an obstruction in the conducting apparatus of one ear, the vibrations are shut in, and the vibrations go in larger quantity to the nerve of the obstructed side than to that of the other side. On the other hand, if there is disease in the nerve instead of an obstruction, no vibrations are perceived and they all go to the healthy ear. In the case of unilateral deafness, the tuning-fork on the vertex is heard better in the deaf ear if the deafness is the obstructive; but in the opposite ear if there is an affection of the nerve of the deaf ear.

The general rough distinction between obstructive and nerve deafness is that in obstructive deafness bone conduction is normal or increased, while in nerve deafness it is diminished. I need hardly say that the one may neutralise the other, and in combined obstructive and nerve deafness there may be normal bone conduction.

We note in the next place that with a normal tympanic apparatus the vibrations are conveyed better through the air than through the bone. That is a big statement, and I may ask you to call it a fact. You will notice in this, that if the tuning-fork is placed upon the mastoid till it is no longer heard, when held opposite the external meatus it is again heard; or, putting it another way, if the tuning-fork is held alternately on the mastoid and to the external meatus, it is heard louder through the meatus than on the mastoid. This was the test discovered by Rinne, called Rinne's test, and in the normal tympanic apparatus Rinne's test is normal or "positive." If the tuning-fork is so heard, any considerable degree of obstructive deafness or disease of the conducting apparatus is excluded.

If there is an abnormal tympanic apparatus, it hampers the ingress of vibrations through the air and it also hampers the egress of vibrations through the bone.

Suppose an obstruction in one ear, then the air conduction is diminished and the bone conduction increased, the tuning-fork would no longer be heard at the meatus after ceasing to be heard on the mastoid. But should you have a pure nerve lesion, then both the bone conduction and the air conduction are diminished together, but of course, the bone conduction being from the start less than the air conduction, you have still the same proportion between them, so that air conduction is still greater than bone conduction, although both together are diminished. This is the typical condition in nerve deafness, Rinne remaining "positive." Next suppose you have an extreme lesion of the nerve on one side, hold the tuning-fork on the bone and it is heard for some time, then when it ceases to be heard, hold it opposite the meatus, and it is not again heard, Rinne's test being abnormal or "negative." We are, in such a case, comparing the air conduction of the affected ear with the bone conduction of the sound one. This "negative Rinne," except in extreme unilateral nerve-disease, indicates an affection of the conducting apparatus.

I would like to add another point with regard to the tympanic apparatus; it seems more particularly required for the conduction of low-pitched tones; and high-pitched tones may be well perceived when the conducting apparatus is considerably diseased or even destroyed. Even with a very high degree of catarrh of the middle ear, so long as it is not complicated with nerve lesion, the patient may be extremely deaf for the low-pitched tones, such as those of the tuning-fork, but may hear the sound of Galton's whistle; and so with considerable amount of disease of the conducting apparatus the sounds of Galton's whistle can be heard perfectly well.

Disease of the labyrinth seems to interfere with the perception of the highest pitched tones.

When in a case of nerve deafness the highest pitched tones are not specially involved, the condition probably depends on disease of the central parts of the auditory tract and may be a functional affection of the auditory centres.

Cases of obstructive deafness may arise in the external meatus, the membrana tympani, or the middle ear. If in the middle ear, the affection may be situated chiefly in the

Eustachian tube or in the tube and tympanum, or in the inner wall of the tympanum.

In that form of chronic catarrh of the middle ear, which extends up through the Eustachian tubes and is by a long way the most common, there is a kind of thickening of the lining and a narrowing of the tubes with more or less an effusion into the tympanic cavity, and perhaps a few adhesions

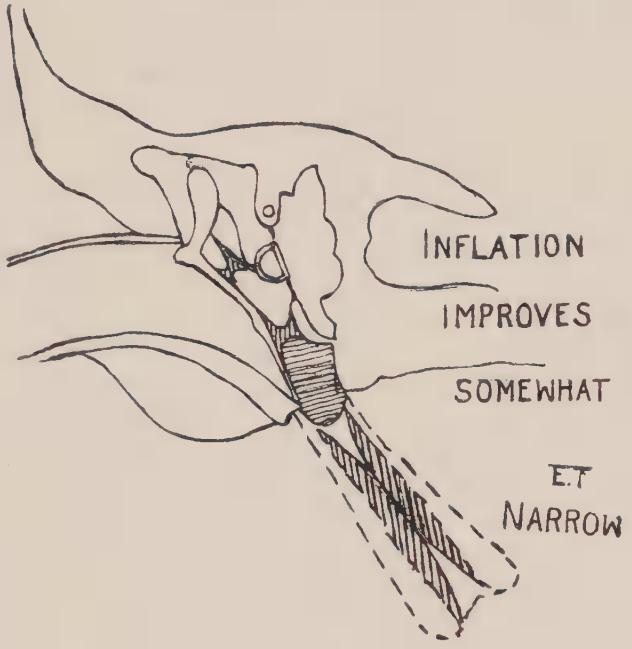


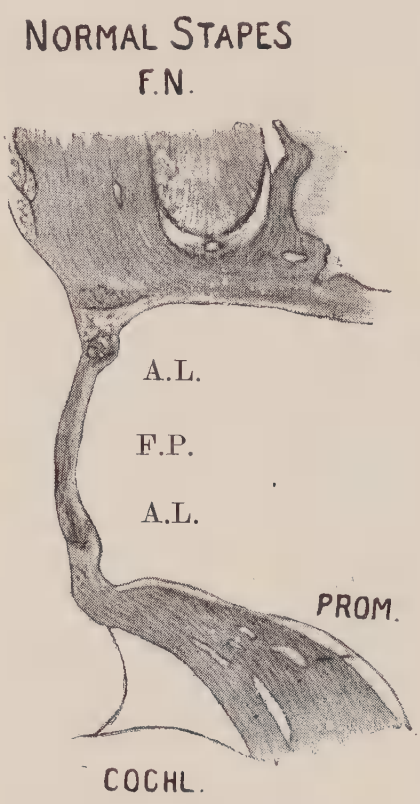
Fig. 1.—Schematic diagram of tubo-tympanic catarrh

(Fig. 1). In this case, on inflation and auscultation the Eustachian tubes are found to be narrow, and inflation brings about a little improvement in hearing. It may cause a great difference in the prognosis of the catarrh of the middle ear, whether there is improvement on inflation or not.

Obstructive deafness from disease situated in the niche of the fenestra ovalis and in the outer wall of the capsule of the labyrinth, brings about ankylosis of the stapes. On a previous occasion I exhibited a drawing of a microscopical section from such a case, showing the nature of this ankylosis.

Fig. 3 shows a section of the normal foot-plate of the stapes—very much enlarged. In the diseased case you see proliferation of bone, great thickening of the periosteum and enormous thickening of the foot-plate of the stapes,

with reduction of the annular ligament. Ankylosis of the stapes is the characteristic lesion in chronic catarrh of the



Figs. 2.—Section of normal foot-plate of stapes (from Bezold.)

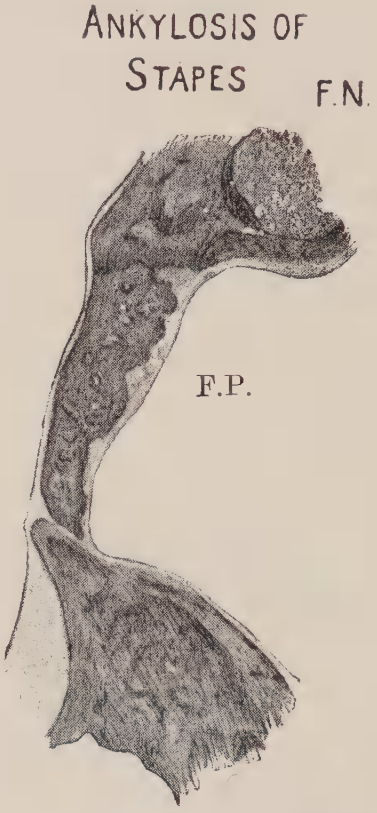


Fig. 3.—Section of foot-plate of stapes in a case of sclerotic catarrh of the middle ear (from Bezold).

middle ear of the sclerotic type, and may arise from various causes. We agreed, pretty well, when we discussed the matter before here, that this ankylosis was often of the nature of rheumatoid-arthritis. With the tuning-fork evidence of middle ear disease there may be no significant change in the appearance of the tympanic membrane, no narrowing of the Eustachian tube and no improvement on inflation. On the other hand, in a case of nerve deafness, where there is no affection of the Eustachian tube, and the disease is entirely situated in the cochlea, inflation makes hearing rather worse than better.

I shall now ask for one of my cases. This first one is a case of *chronic catarrh in the middle ear with some narrowing of the Eustachian tube.*

Miss T. has been under my care for some time on account of dulness of hearing. In her case the tuning-fork tests gave the typical reaction of chronic obstructive deafness. The tympanic membranes were found to be indrawn, the Eustachian tubes narrowed, and inflation produced some degree of improvement in hearing. The case is then one of chronic catarrh of the middle ear, of the Eustachian form, and much more amenable to treatment than the case I shall show you next. Great benefit in this Eustachian case has resulted from the use of the catheter with the injection of parolein, to the ounce of which from 1 to 3 grains of menthol has been added, and the occasional passage of the Eustachian bougie.

This case is one of catarrh of the middle ear, gradual in its onset, and it improves to some extent after inflation. I will ask her to listen to the Galton's Whistle. . . She hears it just at the same moment as we do, showing the preservation of high-pitched tones, although the low-pitched ones are comparatively lost.

In most of these cases there really is not very much to be seen in the tympanic membrane; and perhaps it is worth while to accept the principle that it is not necessary to be very skilful in the examination of the tympanic membrane in order to make a shrewd diagnosis as to the nature of the case of deafness, after a little practice and use of the tuning-fork and Politzer bag. The next is a typical case of *sclerotic catarrh.*

Mrs. C., aged 37, married, came under my care on the 17th December, 1897, on account of deafness and noises in the head. The hearing was worse in the left ear than the right, and the advance had begun very gradually, with tinnitus from the commencement, having lasted twelve years in the left ear and an uncertain length of time in the right one. The supposed cause was her confinement with a second child, and it may be added that she had seven children, her hearing getting worse after the birth of each. On examination, the watch was heard in the right ear at $\frac{1}{2}$in., and in the left ear only on contact. There was distinctly better hearing in the midst of noises or in a vibrating vehicle. Bone conduction, as tested by the tuning-forks on the mastoid, was increased

to a slight degree; the fork on the vertex was heard equally in both ears, and Rinne's test was markedly negative. There had never been any pain or discharge. The noise was of a buzzing and sometimes hissing character. The tympanic membranes were practically normal, and on inflation the Eustachian tubes were quite free, therefore no improvement in hearing resulting. The case was, however, a typical one of sclerotic inflammation of the middle ear, and as might have been expected, treatment through the Eustachian tube was of no avail.

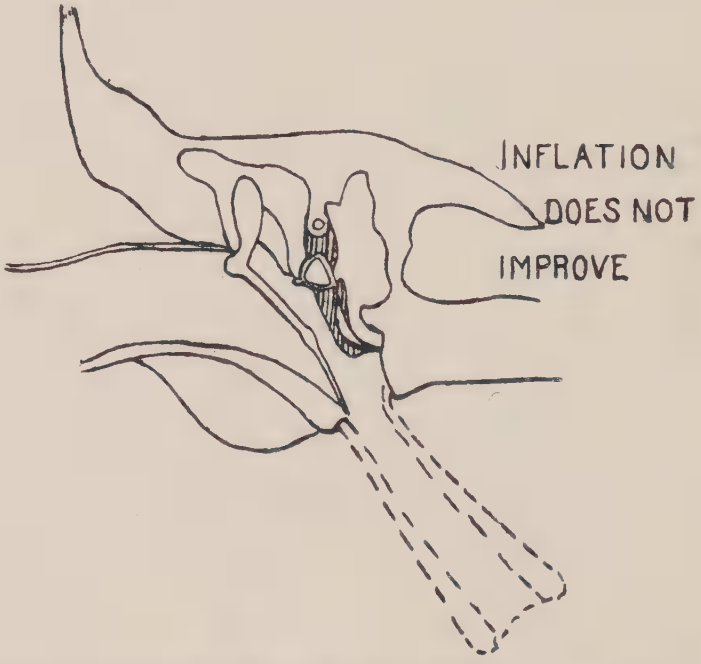


Fig. 5.—Schematic diagram of sclerotic catarrh—ankylosis of stapes.

Her hearing for low tones is very bad. I think she still hears high-pitched tones fairly well. There is probably commencing extension to the other side of the fenestra ovalis and implication of the auditory nerve. This shows itself in the first place by the loss of hearing for the high-pitched tones. The highest-pitched tone she can hear is one produced by a closed pipe 2.8 mm. in height, as compared with the normal of from 1 to 1.5 mm. Carrying out the idea that the improvement in hearing, which so many of these cases of chronic catarrh of the middle ear experience when in a vibrating vehicle, was due to the vibration and not merely to the stimulus of the sounds, I made a trial of the effect of mechani-

cal vibration applied to the spine; and I think it is only just that I should say that I was stimulated to carry out this trial by my wife, who had observed in some of her deaf friends that they heard better when bicycling, and she urged me to try what seemed at first sight to be rather a wild method. Still, the results obtained in a few cases were extremely good, and they showed that it was a plan of treatment that must not be set aside. In this case I made a trial of it, applying the mechanical vibration to the spine several times a week for about three minutes at a time, beginning on the 15th of April, 1898. Within three days her husband noticed an improvement, the noises diminished, and the patient observed that she could hear better in chapel than before. She continued to improve so much that on the 28th April she could hear the watch on the right side at $3\frac{1}{2}$in. and on the left at 1in., and the whisper on the right side at 6ft., and on the left at 3ft. The condition varied from time to time, and this remarkable degree of improvement was not maintained. Circumstances of gestation interfered with her continuing the treatment, and I have only recently seen her for the first time since the birth of her child now five months old. She informs me that her hearing has not been nearly so injuriously effected on this as on previous occasions; and on testing her hearing two days ago, I found that she could hear the watch on the right side at $\frac{3}{4}$in., and on the left at 1in.; the whispered voice at 12in., and 4in., in the two ears respectively. After three minutes of spinal vibration, she could hear the whisper at 2ft. on the right side, and 1ft. on the left.

You will not express surprise at my having tried an utterly unknown method, if you do know how difficult it is to find out anything to touch these cases. This patient is perfectly convinced of the improvement that has taken place, and her husband could say the same. To say that plan of treatment would improve all cases is quite a mistake. I do not know exactly what cases it would improve, but I am obliged to add this to the list of remedies.

As to the method of applying the vibration, the instrument I use is a so-called "toy" motor, having on its own axis a disc of metal placed eccentrically so as to impart a jerkiness to its motion. There is on one side of the motor

a flat curved plate of brass to apply against the patient's back, and on the other a handle like that of a teapot, for convenience in holding. The motor is connected with the electrical current derived from the main or from a battery. The vibrator I show you is placed just on, or to one side of, the spine and allowed to vibrate there. It is pushed higher up until it gets so far that the patient can feel it shake up the bones of the head. It is usually employed for two or three minutes once or twice a day.

I am dealing with cases in which at the present moment there is no discharge. In all cases when a patient comes before us with obstructive deafness we have to ask: Has there been any discharge? With the patient at present before us, if we ask him he would tell us that there was. He had a discharge in both ears for many years, and is a case of *deafness due to the residue of suppurative inflammation of the middle ear.*

Mr. A. came under my care two years ago on account of extreme deafness, and it had got to such a pitch that he felt it would be necessary to give up his occupation. I found that not merely was there some discharge, but a diminution of bone conduction, evidently a simultaneous affection of the middle ear and labyrinth; and when I looked into his left ear I saw a deep depression behind the handle of the malleus, filled with a quantity of yellow cheesy stuff; I cleared that out and then there was a depression: while on using Siegel's speculum I found a little cicatrix, and under this atrophy of the membrane. I tried the effect of an artificial drum, and the result of it was extremely gratifying. A little pellet of cotton wool dipped in parolein with a trace of menthol was applied inside this depression until it touched the head of the stapes; the result of this was to improve his hearing to such an extent that he was able to carry on his occupation. He was afflicted with attacks of vertigo and headache, and I thought it necessary to look to the other ear. I found a deep-seated collection of cheesy matter, broken down epithelial cells, and still some discharge which was very fetid; so I made an endeavour to remove the ossicles—the first thing to do in such a case. Although experienced in the removal of

ossicles I found myself unable to effect it in this case, on account of a defect in the patient's spine, preventing his head being bent over from the right shoulder. I decided to advise the radical mastoid operation, which I performed, with the result that the patient is perfectly free of his headache. There is little or no hearing on the right side, but by means of the artificial drum in the left ear he is able to carry on his work as book-keeper. You can tell from the tone of his voice that the nerve of hearing is touched. If this does not show you a very brilliant result, it is a result which has been very useful to him.

The next case I show you is Miss A. C., who came under my care recently on account of deafness in the left ear and noises in the head of several years' duration. She is aged 18. The various tests indicate an obstructive affection in the left ear, and on examination the posterior half of the membrane is found to be thin and atrophied over a circumscribed area in such a way that it is practically impossible for it to have occurred except as the result of a thin cicatrix filling up a former perforation. The atrophied portion is, however, firmly adherent to the head of the stapes. On inflation the hearing of the watch is considerably improved. I should have no hesitation in labelling this case as one of deafness due to the cicatricial residua of a suppurative inflammation of the middle ear.

I have one or two cases of *nerve deafness* which are perhaps rather more interesting than those of obstructive deafness.

One of the cases that I had wanted to show you was a case of syphilis of the labyrinth, which was probably of the nature of periostitis.

The case before you now is one in which there is *anæmia of the labyrinth*, but *combined with the changes due to age.* After the age of sixty, when we get a nerve deafness which has been gradual in its onset, we may take it to be due to physiological changes, and must not waste the patient's substance and time by carrying on forms of treatment which must end in disappointment. I am going to show you that there is in her case a diminution of bone-conduction. By testing with Galton's Whistle we find she can only hear a sound

from a pipe 5.6 mm. in length. This is a very much deeper tone than the highest the normal ear ought to hear; and this is very characteristic of the changes due to senility. Of course there is no reason why an old person should not have catarrh of the middle ear, but when you have a nerve deafness after the age of sixty, you may put it down as being physiological. That is one of the types of nerve deafness constantly coming before us.

The next is a case of *nerve deafness of doubtful nature* and very unusual.

Nurse D., aged 40, was referred to me on account of deafness in her right ear. For many years she had suffered from suppurative inflammation of the opposite ear, but recently, when she awoke one morning, she found herself almost completely deaf in the right ear. Her menses had been present with abnormal profuseness, and at the same time she had a severe attack of what she supposed was diarrhœa, and which was accompanied by a very considerable discharge of blood from the bowels. Two days after the occurrence of the deafness she became affected with severe vertigo and a feeling of sickness, but the vertigo was rather of the nature of a confusion than actually a sensation as if things were rotating round her. On testing her hearing it was found that the defect was a nerve deafness, but that the hearing for the highest pitched tones was comparatively well preserved. Whispered voice could not be heard at a greater distance than three inches; the watch was heard at two inches. The tuning-fork on the mastoid was rather diminished, though not in proportion to the degree of apparent deafness, and Rinne's test was positive, thereby excluding any material amount of obstructive lesion in the right ear, and establishing a diagnosis of nerve deafness. The range for high-pitched tones was tested by means of Galton's Whistle, and was found to be good up to 0.9, which for the instrument employed was practically normal. Her hearing was tested with a series of tuning-forks with air conduction; and it was found that the deafness was most marked for the middle tones, the highest and lowest being much less defective.

A nerve deafness which does not especially affect the hear-

ing for the high-pitched tones is probably unconnected with the cochlea, and is more likely to be due to affection of the central auditory system in many cases of functional or hysterical nature. In the present instance there was found comparative hemianæsthesia on the right side of the face and body, diminution of the pharyngeal reflex and highly exaggerated knee jerks. A sudden nerve deafness is generally due either to an effusion into the labyrinth, a rapidly developed congestion or anæmia of the part or an hysterical disturbance. In the present instance the last-named seemed the probable nature of the disease and the patient was encouraged to look for improvement while the ammoniated tincture of valerian was ordered to be taken three times a day. Within a few days a remarkable improvement took place, and at the time of the demonstration the hearing had very nearly returned to the normal. The correctness of the diagnosis was extremely probable in view of the recovery. In the left ear there was an old standing suppurative condition, and the hearing for high-pitched tones was actually worse in that ear than in the case of the right one. The membrane was practically normal, and inflation made the hearing rather worse than better. It is a well-marked case of nerve deafness, and it is a little difficult to say precisely what the nature of the labyrinthine affection was.

The following is a remarkable case of *hysterical nerve deafness.* It is a case in which the hearing for high-pitched tones was quite well preserved as compared with the others; and in her case a sudden recovery took place. Her deafness had been previously so extreme that she learned lip reading.

I have another case to bring before you, that of a man who has *nerve deafness, facial paralysis, and paralysis of half his palate and of the one vocal chord,* a combination of disease of the facial, the auditory and the spinal accessory nerve,—at least that portion which gives fibres to the pneumogastric nerve and the muscles of the larynx.

These cases are not very sensational, and possibly to many they may seem dull, commonplace, uninteresting and uninstructive. In any case I have learned a good deal during their consideration, and I shall be greatly disappointed if I do not

learn considerably more from the discussion to follow. Should I not do so it will be the first time this has happened in the whole of my experience of the Hunterian Society.

Case of Hysterical Nerve-deafness.

Miss A., aged 18, came under my care on the 27th May, 1895, complaining of deafness of both ears, stuffiness in the nose and pain in the throat. The deafness was of three years' duration, and it had come on gradually, but had got very much worse immediately after the extraction of eight teeth three months before coming to me. For this operation she was anæsthetised with gas and ether. On examination the hearing was practically the same in both ears. She could only hear very loud conversation, and apparently only when her hearing power was supplemented by lip-reading. The watch was heard at six inches, Galton's Whistle was heard up to the mark 3.8, the bone conduction on both mastoids was diminished, and Rinne's test gave a "positive" result in both ears. There was pain over the mastoids, no discharge was present, and there was no definite history of any previous discharge. At that time she described certain indefinite attacks of giddiness of which she has now lost all recollection. On testing her hearing for various tuning-forks by air conduction, she was found to have completely lost the hearing for "C_{-2}" and for "C_{-1}," while for the other forks extending from "C" up to "c^5," the amount of hearing power varied from 3 or 4 up to 15 per cent.

A diagnosis was then made of nerve deafness of indeterminate origin, but probably "auto-suggestive." Ammoniated tincture of valerian was ordered, blisters were applied to the mastoid process, and galvanism by means of the continuous current to the strength of 10 ma., with the negative rheophores applied to the tragi, was employed for ten minutes at a time. The treatment was varied in the usual way, and the changes were freely run on strychnia, bromide of potassium, and ultimately the liquid extract of ergot. No improvement of any moment took place, and with the natural result that the patient withdrew from further treatment. She came back to say that her hearing is perfectly good, it having returned in the January of 1897, after a "complication" of ailments,

which confined her to bed for a fortnight. While lying in bed her hearing rapidly improved, until in six months it became perfectly normal, and she can now hear a whisper by the right ear at the distance of about 14 feet, and by the left 13 feet.

This spontaneous recovery seems to confirm the original diagnosis. In this case the tuning-fork test for middle tones "c^1" answered to the type of nerve deafness, and they were sufficient to exclude middle ear disease. The tests for air conduction throughout the whole range of audition indicated that the maximum of loss was for deep tones. In typical cases of disease of the labyrinth, the opposite would be the case, and we should expect to find the loss greatest in the uppermost part of the range, the lower part being relatively less defective. The combination then agrees with that described by Gradenigo as typical on the other hand of disease of the nervous centres, and in fact, exactly of what he describes as occurring in hysterical nerve deafness as set forth in his article in Schwartze's notebook. In his more recent publication on auditory disturbances occurring in hysteria, he describes the loss of hearing as being fairly uniform throughout the whole range, but more marked in the lower range on account of the physical nature of tuning-fork vibrations rather than peculiarities in the disease.

Case of Syphilitic Disease of the Auditory and other Nerves.

W.K., aged 41, came under my care on the 22nd June, 1899, on account of deafness in the left ear.

In July, 1890, the patient fell down on his way to his work, and was unconscious for some three days, and on recovery was found to have some weakness on the right side of the body. This attack had been preceded by headache and attacks of confusion. Two years later he had a second attack, which developed suddenly in the middle of the night and left him with paralysis of the left side of the face, complete deafness in the left ear, hoarseness of voice and giddiness. This attack was accompanied by vomiting and noises in the head. During the intervening two years he had suffered from headache, which had been increasing in severity, but which was not definitely worse at night.

The first attack was probably a thrombosis, the second one pachy-meningitis, involving simultaneously the facial, auditory and spinal accessory nerves between the internal auditory meatus and their junction with the pons and the medulla.

On examination he was found to be almost completely deaf on the left side, the watch was not heard even in contact, the tuning-fork by bone conduction was scarcely heard at all, and when placed on the vertex it was heard entirely in the opposite good ear. There was, therefore, extreme nerve deafness on the left side. The left side of the face was almost completely paralysed as was also the left half of the palate and the left vocal cord. He had, therefore, a lesion involving the facial, the auditory and the spinal accessory nerve simultaneously. The history of acquired syphilis was elicited, and there seemed little doubt that the combination of nervous conditions was due to a syphilitic lesion either in the medulla oblongata or more probably external to it at the point of exit of the nerve mentioned.

The electrical re-action of the auditory nerve was found to be well marked on the right side, but wanting totally on the left, at least, with such strength of current as the patient could bear without extreme discomfort.

JANUARY 24th, 1900.—Clinical Evening.

GUMMATA OF THE HEAD AND NECK OF LONG STANDING.

Case shown by Dr. Hingston Fox.

Mary B., aged 41 years, has been married twice, her first husband dying of asthma. She has had three children, of whom two died young, and one abortion. No history of syphilis can be obtained.

She has been under observation for 5½ years at St. Luke's Mission Dispensary, suffering from recurrent creeping gum-

matous ulceration of the integrements of the neck and head. Masses have appeared from time to time behind and below the left mastoid process, at the margin of the left orbit, below the occiput at the right side, on the scalp above the right ear, and at the vertex, and on the forehead. At first subcutaneous, the lumps soften, become adherent to the skin, and ulcerate, discharging a puriform fluid. The left ear is quite deaf. They always heal steadily under the administration of potassium iodide, the deposit is absorbed, and a depressed pigmented cicatrix is left. Quinine has been generally given in combination with the iodide on account of the weakly condition of the patient, who has been badly fed. The local applications used have been red oxide of mercury ointment, iodiform ointment, and iodine ointment, but these have seemed of less importance than the internal treatment. As the gummata have subsided, the patient, despite all warnings, has discontinued treatment, and returned, a few months or a year later, with a fresh growth, always yielding to the same means of removal. Although no history of syphilitic infection, or secondaries can be made out, there can be little doubt as to the specific nature of the lesions.

The following cases were also shown:—

Neuromimesis of Knee Joint and a Skiagram of Separated Epiphysis, by Mr. Tubby.

Three Cases of Nerve Deafness, by Dr. Dundas Grant.

FEBRUARY 28th, 1900.

C. Mansell Moullin, Esq., M.D., M.A., F.R.C.S., delivered the Hunterian Society's Lecture, on

THE CAUSES AND TREATMENT OF MOVEABLE KIDNEY."

A full report will be found in the "Lancet" of May 5th, 1900.

MARCH 14th, 1900.—Pathological Evening.

HYPERTROPHIED HEART.

(From Aortic Disease, etc.)

Specimen shown by Dr. Glover Lyon.

The heart and first part of the aorta exhibited was taken by Dr. Smelt, of Holloway, from a man aged 55, who had been engaged in various occupations, amongst others that of a wine merchant, and had led a very hard life in every sense.

On May 28th, 1898, two quarts of clear fluid were removed from the right pleura. The patient seemed in extremis, with livid face, extreme dyspnœa, the heart beating at only 44 to a minute, a rough post-systolic murmur being present. The patient lived twenty months after this, during which time the pulse rate as a rule was between 30 and 40 a minute, and sometimes much less, on account of dropping of beats.

The patient's life was rendered as passive as possible. Under these conditions he was quite comfortable, but any considerable exertion or excitement, or even stooping, brought on serious dyspnœa. He was subject to fits of cerebral anæmia, and died suddenly after a rather unusual though slight amount of exertion.

For the following report of an examination of the specimen, made after six weeks in spirits, I am indebted to Dr. Williams, Pathologist at Victoria Park Hospital. Heart weighs 18ozs.; right side in every respect normal; left auricle somewhat dilated; mitral orifice somewhat dilated, no thickening of ring; mitral valve normal. Left ventricle greatly hypertrophied, considerably dilated. Some atheromatous patches on the endocardium immediately below and some distance from the aortic orifice. Some very slight thickening and opacity of the aortic cusps. The right cusp shows extensive fenestration near its free margin; a single delicate strand of tissue being connected with the main portion of the valve by two similar strands. The left cusp shows some fenestration,

cusps otherwise normal. Ascending portion of the aorta dilated and extremely atheromatous. Coronary arteries show some, but not extreme, atheroma; lumen not obstructed.

Microscopic examination of a section of the left ventricle showed nothing pathological.

A NASAL POLYPUS OF UNUSUAL SIZE.

Specimen shown by Dr. Dundas Grant, the President.

This exceptionally large nasal polypus was removed from the person of a lady brought to me by Dr. Carter on the 3rd November of last year. For about a year she had suffered from gradually increasing nasal obstruction, until at last she was completely unable to either draw or expel air through the nose. On anterior rhinoscopy I could see far back into the depths of both nostrils the familiar appearance of a nasal polypus, and by means of posterior rhinoscopy the whole naso-pharynx was seen to be occupied by a typical growth. I acted on my general principle, that when polypi project to any great extent into the naso-pharynx it is desirable to administer a general anæsthetic and remove them by means of forceps passed through the nose, guided by the forefinger of the left hand in the naso-pharynx. We procured the services of an anæsthetist who, after a preliminary cocainization of the nasal passages for the purpose of diminishing the bulk of the mucous membrane, and thereby facilitating the passage of the forceps, administered gas. It was impossible to tell beforehand from which nasal cavity the growth took its origin, and on introducing the forceps through the right nostril and palpating with the finger, I made out at once that this was the wrong one; while on performing the same process through the left one, I was able to feel the pedicle of the polypus at the posterior part of the left middle meatus; I then grasped it firmly with the forceps and extracted the enormous polypus which I now show you. As a rule the majority of nasal polypi can be removed by means of the cold snare through the anterior nares under cocaine, but, as I said before, when they project to any extent into the naso-pharynx, it is advisable to administer a general anæsthetic

and remove them by means of forceps guided by the finger in the pharynx.

SARCOMA OF LARYNX.

Specimen shown by Dr. Dundas Grant.

The larynx here shown was removed on Saturday, March 3rd, from a patient whose history is shortly as follows:—

Mrs. D., aged 49, came under may care on the 6th of February on account of gradually increasing loss of voice and difficulty in breathing. Her voice was extremely weak, and she was obviously suffering from distinct inspiratory obstruction. The weakness of the voice had gradually developed since July, 1899, and the difficulty in breathing since December of the same year. The stridor contained some of the "croaky" tone, which is familiar to those who have listened to cases of tracheal stenosis. There was no excursion of the larynx and during expiration there was a marked lowering of the radial pulse. There was no pain on swallowing. External examination of the larynx revealed a well-marked rounded bulging on the right ala of the thyroid cartilage, and the larynx as a whole was quite mobile. On laryngoscopic examination the right vocal chord was almost normal in colour, contour and mobility, but during inspiration there was seen below it a rounded swelling apparently growing from the sub-cordal region. The left vocal cord was very much narrowed, and was fixed during both inspiration and expiration. The ventricular band and ary-epiglottic fold were more or less merged into each other and abnormally swollen, the surface being somewhat, but not much, redder than normal. The diagnosis lying between malignant disease or syphilis, the following history was elicited, that at the commencement of her married life there was one miscarriage, one still-born child, four strong healthy boys, and then one girl who only lived for forty hours. Vague as this was I thought it advisable to order a course of mercurial inunctions and iodide of potassium, but for fear that the latter drug might produce its occasional effect of œdema of the larynx, I considered it advisable to take her into the hospital so that tracheotomy might be performed. This treatment was carried out for a

fortnight, but no change beyond an increase in the swelling on the outside of the larynx took place. After a consultation with Mr. Nunn, as well as my other colleagues, I decided to operate: to explore in the first instance a section of the thyroid cartilage, and then remove the whole larynx. I endeavoured to obtain primary union of the opening made in the front of the larynx, but this has not succeeded, and at present the patient has to be fed by means of an œsophageal tube. She is a person of equable disposition and otherwise in very good health. She maintains her strength extremely well, and there seems at present a fair prospect of her recovery.

The growth was examined by Mr. Wyatt Wingrave, and found by him to be a largish round-celled sarcoma. The following is his report:—For the purpose of microscopic examination a long wedge-shaped portion was removed from the right side of the thyroid gland, extending to the right border of the thyroid cartilage, which was infiltrated by the growth. The greater part of the thyroid gland is infiltrated and replaced by round cells, deposited in homogeneous matrix. The cells possess very large nuclei relatively to the proportion of protoplasm. They are for the most part round, but in places are distorted and spindle shaped, maintaining a constancy in size which is larger than those occurring in granulation tissue. The matrix is well shown by the Ehrlich Biondi stain, as it selects the Rubin, exhibiting in parts a tendency to fibrillation. The growth is evidently a sarcoma, probably originating in the stroma of the thyroid gland, subsequently invading the cartilage; or it may have commenced in the perichondrium or the parathyroid.

HYPERTROPHIED TURBINATED BONE.

Specimen shown by Dr. Dundas Grant.

Miss H., aged 28, referred to me by Mr. Corner, on account of pain on the right side of her nose and some fetid discharge. It had greatly developed within the last four or five years. On examination I found a large polypoid swelling of the middle turbinated body, and to its outer side a small accumulation of muco-pus. The latter might have come either

from the sphenoidal or the maxillary sinus, or from one of the anterior or middle ethmoidal sinuses, or it might have simply accumulated in a recess of the middle turbinated body. I washed out the antrum by Lichtwitz's method, with the result of bringing away very little pus, and I was assured that it came from the frontal sinus, the escape from which was hindered by the presence of the swelling described. I, therefore, recommended that the anterior part of the middle turbinated body should be removed, and I received permission to do it.

The portion removed consists of an extraordinarily almost solid bone, the middle turbinated body having evidently undergone an osteitic change. The result of transillumination was not a very striking one, but showed slight increased opacity of the region of the right frontal sinus, and the removal of the swelling was indicated for two reasons; in the first place to give relief from the pain which its actual pressure produced, and in the second place to allow of the exit of secretions from the frontal sinus, which was hindered by the pressure of the growth upon the infundibulum through which the sinus empties itself. These enlargements are a very fertile cause of headache as well as of perpetuation of frontal sinus catarrh, whether mucous or purulent.

PACHYMENINGITIS HÆMORRHAGICA.

Specimen shown by Dr. F. J. Smith.

It was taken from the body of a man, æt. 38; the history was briefly as follows:—He had been acting for two or three months, complaining only of weakness and occasional sickness, but no headache or other mental symptoms; one day he was seized with a "fit" (nature very indefinite from friends' description), and remained more or less unconscious from then till his death some three weeks later. In the unconscious condition all one could say was that the pupils remained equal and re-acted to light readily, the knee jerks were equal and glib, and there was certainly no paralysis, either of limbs or of head or eye muscles.

By exclusion of enteric (no temperature), uræmia (urine natural), Addison's disease (pulse too good and no bronzing),

cerebral tumour (no optic neuritis), he diagnosed general paralysis of the insane, and such indeed seemed the only possible theory.

On post-mortem the whole of the membranes of the brain were intensely congested with very evident extravasation of blood in patches, they were thickened too, and on peeling left a roughness of the cortex (comparable to that of a granular kidney), pointing very definitely to implication of the brain in a chronic fine sclerosis: permission was refused for further examination of the body. The condition of the cortex showed that the lesion of G.P.I. was present, though, as Dr. Smith remarked, the meningeal condition was something additional.

AORTIC MITRAL AND TRICUSPID STENOSIS WITH UNIVERSAL ADHERENT PERICARDITIS.

Specimen shown by Dr. F. J. Smith.

It was taken from a girl, æt. 17, and weighed 32 ozs. There was an old rheumatic history.

Dr. Smith remarked on the complication of the valvular troubles, and said that the adherence of the pericardium had escaped detection before autopsy. He was of opinion that this was so in the majority of cases, particularly when marked valvular trouble was also present. He thought the specimen was one to make one feel very strongly the absolute necessity of prolonged rest in bed while the endocardial trouble was still recent.

Dr. Smith also showed a specimen of Sarcoma of Kidney, weighing 2lbs. 4 ozs., taken from a child æt. 10 months.

ORDINARY MEETING.—March 28th, 1900.

"SOME POINTS IN THE THERAPEUTICS OF GOUT."

Paper read by Dr. David Ross.

Notwithstanding extensive research, the pathology of gout remains enveloped in a cloud of theories. Aretaeus, a contemporary of Galen, naively remarks that "as to the nature of the disease, none but the gods can truly understand it,"—

and one wonders how much longer the gods are to have a monopoly of the secret.

There has been no lack of theories, but a lack of their proof; and as most of these confine themselves to the relation of uric acid to gout, I would plead with you for a broader conception of the nature of gout, for I take it that you all are conversant with the "quadriurate" theory of the late Sir William Roberts.

Garrod's theory of the relation of uric acid to gout is founded on the view that the kidneys fail, either temporarily or permanently, to excrete this acid which they manufacture; and that the premonitory symptoms, and those of the paroxysm, arise from the retention of excess of it in the blood, and the effort to expel it from the system.

He allows, however, that these views are not by themselves sufficient to explain all the phenomena of gout. We do know that in gout there is an accumulation of urates in the blood, but when we go beyond this we find a plethora of conflicting theories, and, what is worse, a mass of conflicting experimental facts and conclusions deduced or implied from them.

Even by the very best methods conflicting results have been obtained from the examination of urine, mainly due to the wide fluctuations to which the uric acid excretion of healthy persons is liable, showing the utter futility of comparing the uric acid excretion of a gouty person with that of a healthy individual.

From the presence of uric acid in large quantity in the blood and tissues in many morbid conditions, e.g., pneumonia, Bright's disease, leucocythæmia, etc., it seems clear that there is no close relationship between excess of uric acid in the blood and gout.

As Dr. Chalmers Watson points out, the degree of causal relationship is in general over-estimated, and writers have failed to sufficiently observe that in gout the error in proteid metabolism, which leads to an excess of uric acid in the blood, may also induce the presence of other bodies more or less toxic, which may be responsible for many of the symptoms of chronic or irregular gout. We have another point of evidence in favour of this, namely, the conditions in

leucocythæmia. Here we find a very marked excess of uric acid in the blood, existing for a lengthened interval, without inducing any of the clinical manifestations of acute or chronic gout. This indicates that the nitrogen metabolism in the two diseases is markedly different.

The search for uric acid has been so keen that observers may have overlooked the presence of other quite as important causal factors; for, as Bonchard pertinently remarks, "we talk much of uric acid in gout, because we can see it without looking for it, but that we do not talk of what we do not see, and above all of what we do not look for." He says, "it has by no means been demonstrated that in gout uric acid is the only or even the chief matter contaminating the fluids."

Some time after the publication of his work on "Uric Acid, etc.," the late Sir W. Roberts declared that "he himself was getting more and more in doubt whether uric acid covered the whole field of gout." He was disposed to look upon uric acid as an incident in the history of gout, and that "if uric acid were absolutely withdrawn from our conception of gout, a pathological entity would still remain and be recognisable as gout. It is a most curious fact that while so many have copied wholesale from Sir W. Roberts's work, very few indeed seem to have taken any notice of this most important statement,—but then, perhaps, it is convenient to ignore such a declaration.

Dr. Ewart seems to put the matter very tersely in saying that gout is really made up of the "uric acid trouble," and of "something else," or rather, in the order of events, of something concerning which we should like to know more than we do, and, in the second place, of the uric acid complication. What we commonly understand by declared gout may represent late results only, having little in common with the *fons et origo mali*. The stage of purely functional disturbance possesses no strict nosological position, but for clinical purposes the term "goutiness" seems the most appropriate.

This general gouty state or goutiness is believed to be induced by abnormal albuminous disintegration, chiefly probably within the liver, from its functional derangement, which

is not primary but is due to products conveyed to it in the portal blood from disturbances initiated in the gastro-intestinal area,—hence the initial difficulty of gout is a digestive one. Besides the excessive quality and quantity of food, an imperfect oxygenation of the blood supplied through the hepatic artery, generally referable to sedentery or luxurious habits and confinement to ill-ventilated atmospheres, will disturb general as well as hepatic metabolism and contribute to the acquirement of the gouty habit.

Derangement of the liver consists in certain disturbances of the chemical processes within it, and such products of disordered metabolism, though differing from the normal by only slight variation of their chemical composition, may be highly deleterious in the action on the body. If the conditions persist, the repeated introduction of this peccant matter into the circulation may produce a special form of degeneration in some of the fibroid tissues,—the heart and vessels may become diseased, as well as the skin and joints, and structural disease of the kidneys may ultimately result, preventing the excretion of uric acid.

As regards the renal conditions that obtain in gout, there is no unanimity of opinion. Even Roberts asserts that the relations between articular gout and renal disease are both complicated and inconstant. In many cases the renal affection appears distinctly as a sequence of the arthritic. In other cases, signs of renal disease precede the arthritic manifestations, or again, the two conditions may arise simultaneously. It is quite common to see articular gout, even of a chronic and inveterate character, run its entire course without any accompanying signs of structural disease of the kidneys.

Were renal disease in itself capable of bringing about the uric acid disturbance and gout, all cases of lead intoxication and Bright's disease should develop gout sooner or later, but this is far from being the case, hence some other factor besides renal inadequacy is necessary to determine the result.

Concerning uric acid, physiologists are almost unanimous in regarding it as a normal constituent of the blood, organs and tissues of the body. Dr. Chalmers Watson's recent investigations conclusively prove uric acid to be present in the blood of birds, snakes and lambs.

The work of von Jakoch shows the quantity of uric acid in normal blood to be very small, and when we reflect upon the small total quantity of uric acid excreted in twenty-four hours in health—about 0.7 grammes or 11 grains—the actual percentage present in the blood must be exceedingly small.

Croftan, in America, found uric acid in the blood of twelve normal subjects.

As regards the nature of the combination in which uric acid exists in the blood and tissues, I am emphatically opposed to the theory of Sir Wm. Roberts that it consists of a "quadriurate,"—a true and definite compound of biurate and uric acid in the proportion of one molecule of each.

From some experiments I made in conjunction with Dr. Tunnicliffe and Dr. Rosenheim, I endorse the opinion of Bence Jones, who stated that the uric acid compound exists as a mixture of biurate and uric acid in loose combination, and in varying proportions of the molecules. Again, the late Sir Wm. Roberts stated that the behaviour of uric acid and its compounds with blood serum depends on its saline ingredients, and that they behave in exactly the same way with his so-called standard solvent* as with blood serum. From an extensive experience with both media, I assert that this is not so, and that results obtained by the one medium are not applicable to the other.

As to the origin of uric acid I can offer no satisfactory explanation. There is strong evidence that the production of uric acid, both in normal and pathological states, does not belong exclusively to the liver, that the spleen takes a large share in it, and that some of the uric acid may own an even wider derivation from glands and tissues.

The nuclein theory of Horbaczewski has not solved the problem, and in a recent number of the "Journal of Physiology," Milroy's figures seem to prove conclusively that there is no definite and constant relation between the excretion of uric acid in the urine and the number of leucocytes in the blood.

If, then, the uric acid compound is a product of normal metabolism, circulates in healthy blood, and is excreted by the kidneys, it must be harmless and non-toxic.

* Standard Solvent (Roberts). Sod. Chlorid 0.5 g. Sod. Bicarb 0.2 g. Aq. Destillat 100 c.c.

We must, therefore, look elsewhere for the "materies morbi" which causes the manifold symptoms of a disease well named "protean"—the flushings and palpitations, the headaches, irritability of temper, and various nervous disorders; the cramp in the limbs and pricking pains in the joints; the anorexia, flatulence, acidity, irregularity of the bowels, and other digestive troubles.

Klemperer concludes that in gout some unknown substance, "Gichtstoff," meaning gout stuff, or substance producing gout, leads to inflammatory and necrotic processes in various tissues, and the necrotic parts have the power of attracting from the blood uric acid, which is present in excess. Dr. Berkart considers that the severity of the local symptoms attending paroxysmal gout are inconsistent with the assumption that they are produced by a primary chondritis, due to irritation set up by the deposition of sodii biurate in the articular cartilages, except for the presence of uratic deposits, which he regards as an epiphenomenon, and not the cause of the gouty paroxysm; the changes do not differ from the lesions met with in other conditions in which uric acid plays no part; and he regards them as the primary phenomena of the disease,—a degeneration and necrosis of tissues due to a profound disturbance of nutrition; and that the urate is deposited in the necrosed tissues of the joint from the inflammatory serum in which they are bathed.

Dr. Ord, Dr. Norman Moore, and Mr. Bowlby all believe that uratic deposits only occur in tissues which have previously begun to generate.

Dr. Garrod says that possibly it might be found that while uric acid was, so to speak, the indicator, leucomaines were the real cause of gout; and concludes that we are not at present in possession of such knowledge of the pathology of gout as would be required to enable us to formulate a scientific course of treatment.

Virchow arrives at the conclusion that some substance circulating in the blood with an apparently selective affinity for certain membranes, prepares a suitable nidus for the deposit of water.

Schmoll suggests as a working hypothesis that the necrotic processes which he regards as antecedent to the deposition of

water, are due to the accumulation in the blood, before and between the gouty attacks, of nitrogenous products of metabolism of uncertain nature; and suggests, as the aims of future researches, the determination of the nature of the nitrogenous substances which are so retained, and of the influences upon which their retention depends.

Fagge regarded a paroxysmal attack of gout in the light of an accident occurring in the course of an essentially chronic change in the joint affected.

Without enumerating any more theories as to the nature of the peccant matter, I should like to say a few words on the role the alloxuric bodies are supposed to play. With normal hepatic metabolism, the bulk of albuminous substances is transformed into uric acid; while perverted hepatic metabolism causes impaired uric acid formation and leads to the production of highly deleterious products, which Kolisch and others suggest consist mainly of xanthin bases,—normally present only in very minute quantities. These bases entering the circulation, and passing through the kidneys, exercise a deleterious influence,—producing inflammatory changes in the joints, kidneys and elsewhere, which prepare the suitable nidus for the deposit of urates.

You will see that even as regards the causal relationship of the uric acid compound to paroxysmal gout there is no consensus of opinion, and that different opinions are entertained as to whether the original deposition of biurate is the cause, the accompaniment of the result of the local affection of declared articular gout.

The latest pronouncement is that of Dr. G. W. Balfour, who declares that all the objective phenomena of a gouty paroxysm are readily explicable on the supposition of a stasis in the capillaries of the affected joint, and that the urates slowly crystallize out of the extravascular fluid, and get left behind when the serous part of the fluid is reabsorbed, infiltrating the joint, the cartilage and the surrounding tissues, and gradually accumulating after each succeeding paroxysm, till they form those tophaceous deposits we know so well as the result of repeated attacks of gout. Seeing that the pathogenesis of gout is still so obscure, the treatment must necessarily be rather unsatisfactory and more or less empirical.

The great principle is not to attempt to treat gout at all, but attempt to treat the individual,—treat the man rather than the ailment; and it is essential to have in view the whole malady and not the mere accidents of it. Whatever will tend to promote the general health of the patient, e.g., fresh air, judicious systematic exercise, diet, avoidance of worry and fatigue, baths, etc., will be of value, hence the success of a regular course, e.g., at Carlsbad, from the combined hygienic, dietetic and hydrotherapeutic regimen.

As regards *diet*, the first principle is to adapt it to the individual, as there is no special diet for gout. It seems quite clear, however, that the ingestion of large quantities of proteid matter, whether animal or vegetable, is injurious, due to the undue strain thrown on the liver and disordering its metabolism, and not to their necessarily producing an excessive amount of uric acid. There is usually an excessive intake in nitrogenous elements, so we must limit the *quality* of food. But it is also necessary to limit the *quantity* of food, so that the patient never fully satisfies his appetite.

Excess of fat interferes with the metabolism of the albuminates, and is therefore harmful. A golden rule is that whatever food gives rise to symptoms of gastric or duodenal dyspepsia should be forbidden.

Alcohol, in all forms, tends to the development of gout when there is the least predisposition. We do not know what constituents of port, champagne, and the heavier ales are harmful to those who have a gouty tendency, but it is likely they act by disordering hepatic metabolism.

Sugar, per se, is probably not harmful, but there is evidence to show that if it be freely taken in addition to a varied and mixed diet, especially with certain articles and with wine, an imperfect fermentative process is set up in the stomach and small intestines, which tends to flatulency and acidity.

Regular *exercise* is of benefit in that it admits more oxygen, and also increases the activity of the kidneys, skin and bowels,—all of which will unburden the liver by hastening the removal of metabolic products from the blood. When exercise is not possible, massage may be resorted to.

Pure *water*, preferably hot water, with or shortly after meals, provided it is not taken in too large quantities, so as to

disturb digestion, fulfils the first important indication in the treatment of gout, viz, the elimination of waste matters.

Seeing that disturbance of the liver has probably much to do in the production of gout, it is very important to keep that organ in proper order.

From its being a powerful hepatic alterant, and also in that it affords relief to the portal system, Colchicum is probably one of the best drugs in the treatment of the gouty state. Given as a pill overnight, in combination with mercury—another valuable alterant—and followed by a saline aperient in the morning, the therapeutic effect obtained is very marked; and such treatment, judiciously carried out, often works wonders in not only improving the general condition of a gouty patient, but in warding off attacks of paroxysmal gout. From their action as alterants, as diuretics, and as local and general antacids, alkalies are of immense benefit in treating goutiness, in that they promote metabolism and also aid the poison eliminating function of the kidneys.

The superiority of the sodium salts in dyspeptic states, in gastric and intestine catarrhs, and in disturbances of the function of the liver, so common in the subjects of the gouty diathesis, is admitted by Garrod himself. Although the sodium salts are specially decried by Roberts as being worse than useless as uric acid solvents, and as being harmful in the gouty state, yet we find clinically they are of real value, in that they influence the antecedent determinant morbid states. Waters containing sodium chloride encourage tissue change, and because this salt is naturally contained in the blood and lymph it has a preservative effect upon red corpuscles, epithelium, etc.

Perhaps the strongest proof which we can adduce of the value of sodium salts in gout is the fact that they are largely prescribed, especially on the Continent, and largely taken also in the shape of mineral waters, in spite of experimental evidence which has denied to them any important direct solvent power for uratic deposits, and placed them under a suspicion of increasing their precipitation.

The well-known fact of some patients starting treatment at a spa being attacked by paroxysmal gout is often attributed to the precipitation of biurate being accelerated by the

mineral waters rich in sodium salts. But surely a patient at a spa does very many other things besides drink sodium waters. The whole tenor of his life is suddenly changed, his habits, diet, exercise, etc., are revolutionised; and all this, in a goutily disposed individual, whose balance of health is easily upset, is quite sufficient to induce an attack of gout without calling in the *deus ex machina* of sodium salts.

According to Lauder Brunton, salicylate of soda has a greater action upon the liver, as a hepatic stimulant, than almost any other drug; and in obstinate constipation it will often tend to keep the bowels regular without any purgative whatever.

Arsenic has a powerful influence in promoting metabolism, and is a hæmatinic of great value in gout, when such an effect is desired. Its further action as a nutrient and nervine tonic constitutes it a valuable therapeutic agent.

Iodide of Potassium, if long continued in fairly large doses, has a remarkable influence in retarding degenerative processes in various tissues, and so staves off the worst forms of pulmonary cardiac, vascular and renal disorders so commonly associated with the gouty constitution.

It is especially useful in cases presenting subacute and lingering swellings of the joints with some effusion, in the painful gout of the sole and of the heel, in the myalgic complications of gout and in the neuralgial.

The action of the iodides is somewhat depressing, but this may be prevented by combining them with cinchona or nux vomica. The iodides have a widespread alterative action, but we cannot explain their mode of action in goutiness, except that from the extraordinary rapidity with which they travel through and permeate the system, they stimulate and accelerate metabolism.

In commencing the treatment of paroxysmal gout, the old-time blue pill, followed by a seidlitz powder or a black draught is scientifically sound. The saline not only completes the evacuation and stimulation of the bowel and the cholagogue effect of the mercurial, but its hydragogue influence will drain a certain amount of water from the portal vein, and thus relieve the hepatic congestion.

The testimony in favour of *Colchicum* seems to be over-

whelming, although no adequate scientific explanation of the nature of its action has yet been found, because we do not understand the pathology of gout or the nature of the tissue changes which gives rise to goutiness. In all probability its action varies in different cases.

A large part of its beneficial effect is no doubt due to its decided action on the liver. Powerful cholagogue action necessitates active hepatic metabolism, and with this is secured a more complete disposal of uric acid and other products, which are believed, with good reason, to be retained in the liver in cases of gout.

Dr. Ewart points out that cardio-vascular effects are observed in acute gout. We have a violent local vascular storm, turgid veins, paralysed arterioles and œdema. The pulse is tense and rapid, thereby increasing pressure and pain in the inflamed joint.

Cardiac depressants might be expected to mitigate these evils, and colchicum, which abates them "like magic," probably acts in this way. Sufficient should be given to increase secretion from the skin, the intestinal mucous membrane and the kidneys, but nausea and vomiting should be avoided. Combination with an alkaline saline aperient increases the therapeutic effect.

The evidence as to the efficacy of sodium salicylate in acute gout is contradictory. In some cases it undoubtedly acts promptly and decidedly, and although it has succeeded in some cases in which colchicum has failed to give relief, I do not see the necessity of calling these cases rheumatic.

If diarrhœa happens to be present, so that colchicum and salines are contra-indicated, then salicylates should be employed. Their value is probably due to their cholagogue and cardio-vascular depressing property.

Dr. A. P. Luff stated that although the composition of sodium quadriurate might be found on analysis to vary in different samples it did not destroy his faith in the existence of that body. It was a very difficult substance to prepare owing to its extreme instability. The presence or absence of pain in different cases of gout depended, he believed, upon the rapidity of deposition. It was the suddenness of the deposition which caused the pain. In his opinion the gout producing or inducing properties of some wines and beers were due to the presence of ethereal salts, which in all probability

powerfully affected the metabolism of the liver, and possibly of other organs. His own experience was that although salicylate of soda was of great use in rheumatic conditions, it was not of use in true gouty conditions.

Dr. Fortesque Fox held that whilst the chemistry was still in doubt, gout might accurately be called a disorder of metabolism. It was often hereditary, often brought out by changes and phases in the individual—such as the changes incident to the epoch of middle age—and often also unaccompanied by articular manifestations. He believed that alcohol in all forms tended to provoke and increase this disorder. In some cases a very minute quantity of wine aggravated all the symptoms. Elimination was the secret of successful treatments, and waters and baths were only operative as they effected a gradual restoration of normal elimination. Setting aside the internal use of waters, very much could be done by baths alone—as at Aix-les-Bains—in encouraging elimination by the skin. Such treatment, in his experience, usually produced a recrudescence of acute symptoms, a more active phase of disorder replacing the chronic phase; but this, if not excessive, was, he believed, of favourable augury. He anticipated that in time it would be recognised that all cases of gout should be treated by balneological methods.

Dr. Glover Lyon pointed out the impossibility of framing a rational chemical method of treatment founded upon the present imperfect knowledge of the chemistry of gout. He thought that too much stress was laid on mere solvents in the removal of urates from the cartilages, which after all were living tissues, and capable of taking an active part in expelling deposites. He advocated mixed and varied diets as being the most easily assimilated.

Dr. Hingston Fox said that the cases of gout which came before him were mostly connected with sedentary habits and over eating and drinking. He thought that much of the benefit of spa treatment was due to the insistence on early rising, walking in the fresh air, and regulated diet. Sydenham sent a patient to Inverness ostensibly to consult a Dr. ——, who had no existence, and on the patient's return, indignant from the long and toilsome journey, the gout had disappeared.

Dr. A. Davies said, as bearing on the importance of exercise quoted by Dr. Hingston Fox in his anecdote of Sydenham, it may be worthy of remark that Sir Dyce Duckworth recently stated at a discussion on "Inquiries Respecting Alcohol" before the Life Assurance Medical Officer Association, that he had yet to learn of a Highland ghillie suffering from gout.

Dr. Butler Harris drew the attention of the Fellows to the mitigating effect of collodion painted on an inflamed gouty joint. The pain was speedily relieved and the inflammation lessened by such treatment. He had first learned the method from Dr. Vivian Poore. He remarked on the influence of other diseases in producing acute attacks of gout; and instanced a case in which after several attacks of influenza, the patient invariably was laid up with acute articular gout, each time in a different joint.

As regards the etiology of gout he mentioned that clinically the evidence was as obscure as it was experimental. Two cases recently had come under his notice: the attack was evidently brought on by worry in the case of the first patient, who was lean and ill-nourished; in the case of the second, a plethoric woman, by insufficient exercise during a long and trying winter. Both patients, it was interesting to note, were teetotalers. All one could say, clinically, was that the attacks were the accumulated effects of insufficient metabolism—effects of widely different origin.

The President was surprised to hear Dr. Luff's depreciation of the value of salicylate of soda; he prescribed it with great frequency in combination with bromide of potassium in cases of gouty cachexia or irregular gout, and found it of immense value in such manifestations as were apt to come under his notice. He was often guided in his diagnosis by the existence of nervous irritability, increased pulse tension, the history of typical gouty attacks in the patient or his predecessors, especially when arthritic disturbances were excited by dietetic rather than meteorological conditions. His friend, Dr. Ogier Ward, had related to him a very striking instance of freedom from gout following the habitual use of cyder instead of malt liquors. He thought that the vegetable acids might be more used, both dietically and therapeutically, than at present. In Germany the acid of the apple is used in the preparation of malates and pomates.

Dr. David Ross briefly replied.

APRIL 11th, 1900.—Clinical Evening.

A CASE FOR DIAGNOSIS.

Dr. Butler Harris showed a baby with a sublingual swelling, and asked for the opinion of the Fellows regarding its nature.

Dr. Fred. J. Smith said he had no doubt the lump was some form of developmental error, most probably a persistent thyroglossal

duct; he thought this was so because of its position in the middle line of the body, and from the softish cystic feel of the lump, he thought, too, that the veins in the floor of the mouth looked more like ones disturbed by pressure than ones increasing by growth, and for this reason he excluded a malignant growth. For treatment he advised waiting till the child was a little older (a year or more), and then radical incision.

Dr. Rawes considered it to be one of venous nævous, and based his diagnosis upon the presence of distended veins in the neighbourhood, and by the fact that the tumour could be so easily compressed between the forefingers.

Mr. Targett suggested that it was a nævoid growth at the root of the tongue, on account of the increased size of the swelling when the child cried, and the presence of numerous dilated vessels in the mucous membrane. He thought that it had enlarged too rapidly for a sublingual dermoid cyst.

The President considered it nævoid, and suggested treatment by means of electrolysis.

HEMIANOPSIA.

Case shown by Sir Hugh Beevor.

Richard H., aged 49, upholsterer.

Dr. Moynihan brought this patient September, 1897, a few days after a sudden attack which left him with much loss of sensation of left side, slight left paralysis and impaired intelligence.

In November, 1897, he was under Dr. Ferrier's care, and this record was made:—

Family history.—Good. Previous history no ailment but syphilis seventeen years ago. The patient said a few months ago he noticed a sudden loss of sensation of left side, his eyes were so affected that he used to spoil cloth by not cutting it properly. He notices little alteration since attack commenced; the loss of power in arm and leg has been increasing; he had no loss of consciousness at time of attack, and has had no headache nor vomiting. Patient is a well-built man, looking stupid and listless.

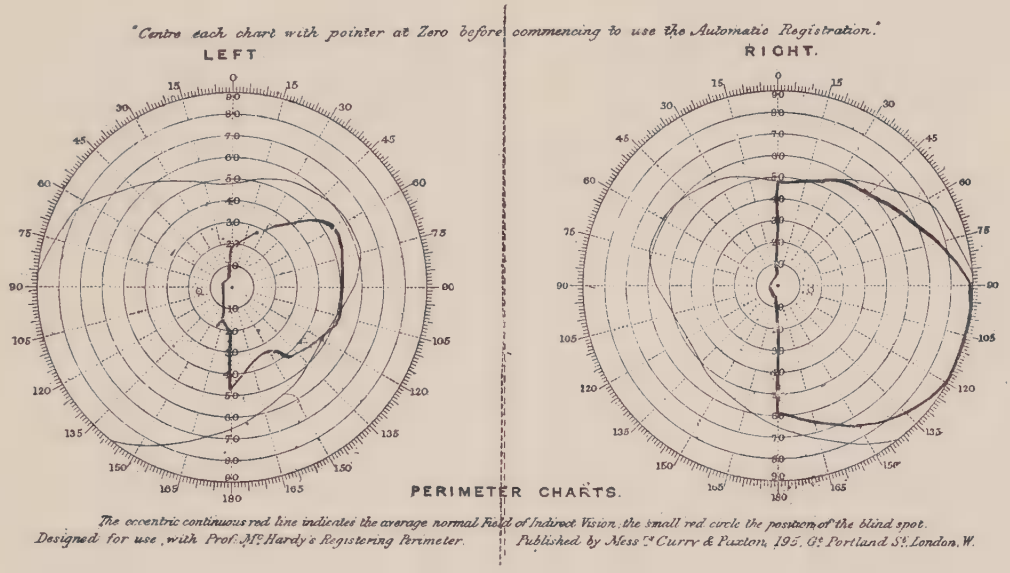
Sensation.—Taste and smell normal; hearing less on left after removing cerumen; vision hemianopsia left, complete

to middle line; analgesia left arm and leg; anæsthesia face, arm and leg; loss of muscular sense, arm and leg.

Motor.—Gait, walk with slight stagger, tendency to fall backward and to the right. Left hand grasp shows loss of power.

Reflexes.—Ankle clonus and exaggerated knee jerk present.

Eyes.—Ophthalmoscopic exam. normal. Wernickes pupillary reaction. Perimeter chart annexed.



Cranial tenderness on deep pressure elicited over right parietal eminence.

One year later patient was admitted for a sore throat; examination then showed vision as in the chart—sensation elsewhere improved but still impaired for touch, no analgesia, sensation for temperature normal, muscular impaired. Left tendon reflex excessive.

Sixteen months later, February, 1900, Dr. Moynahan reported him attacked with vomiting and left sided convulsion, with conjugate deviation of eyes to the left followed by paralysis of left side and of right external rectus oculi, for a few days he was semi-conscious.

In a few weeks ocular movements became normal, and the patient's condition seemed little altered by his recent attack; the gait perhaps was more unsteady. Some deficiency in

movements of left angle of mouth was apparent and equally so in voluntary or emotional excitement.

Dr. Fred. J. Smith said it was a very interesting case, both from a pathological and from a localising point of view. As regards the actual nature of the lesion, he thought, from the absence of neuritis and from the stationary nature of the symptoms for over two years, it was probably a softening either thrombotic or embolic; he thought a tumour was ruled out by these facts, and probably also disseminated sclerosis, though the latter presented some very strange cases at times.

As regards its situation he thought the problem much more difficult; in the first place he asked whether Sir H. Beevor had tested the blind side of the retina for a light reflex, though from the other symptoms present he thought the lesion must be more central than the optic tracks; the staggering in the gait, he remarked, might possibly be due to hemi-paresis of sensation leading to inco-ordination, and not necessarily to subjective unsteadiness; he was inclined to place the lesion at the hinder part of the posterior limb of the capsule (the sensory crossway), believing that a single lesion here might cause all the symptoms, and, if possible, he would prefer to ascribe them to one rather than to multiple lesions. If the gait were ascribed to cerebellar influence, he thought that the hemianopsia would require a second focus of destruction to explain it as it was so very complete.

Dr. Glover Lyon suggested that the case might be functional. He pointed out that there were no signs present that definitely pointed to organic disease. The difficulty in locating the lesion also pointed to such an opinion. Cases similar to Sir Hugh's often proved to be functional.

Dr. Rawes remarked that the symptoms were too well defined, too wide-spread, and the evidence of secondary degeneration in the cord too pronounced for a functional lesion.

The case was a complicated one, and very difficult to explain by a single lesion. He thought that hemianæsthesia and hemianopsia, which occurred two years ago, might be due to hæmorrhage in the posterior portion of the internal capsule and the convulsive seizures, recently occurring to a lesion of the cortex, probably gummatous.

Sir H. Beevor agreed with Dr. Fred. Smith's diagnosis of probably more than one lesion in view of the patient's gait, thinking this could not be accounted for by impaired sensibility on one side; that tumour was present seemed evident from the recent attack, and pressure would well account for recent temporary paralysis of the right sixth nerve.

FRIEDREICH'S ATAXIA.

Case shown by Dr. F. J. Smith, by the kind permission of Dr. F. Warner.

A girl, æt. 14, with the following history.

Parents healthy with no obtainable nervous history. The child is the eldest of four children, and was quite well till the age of seven, when she had measles. After the measles she was noticed to have twitching of the limbs, which was diagnosed as chorea; with the twitching there was noticed a difficulty in walking, and this, it is said, has got steadily worse. In fact, at the end of 1899 she was still thought to have chorea. On more systematic examination of the nervous system, however, it was seen that this diagnosis was at least incomplete. Thus:—

Motor side.—There seems to be little if any local weakness but there is a general feebleness of the whole muscular system. There is some tremor of the fingers.

Sensation appears to be a little blunted over the arms; once she mistook heat for cold, and once seemed not to feel a simple touch.

Co-ordination is markedly interfered with in all her limbs; she cannot stand alone, much less walk, even with her eyes open; with the hands she can pick up small objects fairly naturally and easily, so long as her eyes are open, but on closing the eyes she completely loses the power of touching her nose with the finger, and cannot locate her limbs at all.

Reflexes.—There are no knee jerks, no ankle clonus; on testing plantar reflex the big toe is first extended. Bladder and rectum unaffected. Cranial nerves seem unaffected, though her intellectual faculties are somewhat deficient.

Dr. Smith remarked that he thought a provisional diagnosis of Friedreich's ataxia was most likely.

Mr. Targett called attention to the marked degree of scoliosis present in this case, and to the resemblance which it bore to the trophic scoliosis of syringomyelia. In the latter affection scoliosis occurred in more than half the cases. Pes cavus was present in both disorders, though it was more characteristic of Friedreich's ataxia.

Neuro-pathic arthritis such as was well known in connection with locomotor ataxy and syringomyelia had not been met with in Friedreich's ataxia.

Sir H. Beevor commented on the constancy of the pes cavus and lateral curvature in these cases.

Dr. Smith drew attention to the fact that the child was the eldest of the family, so that it was not impossible that some of the others might show symptoms later on, and thus suggest a family disease, which Friedreich's ataxia frequently was; he adverted to the primary hyper-extension of the big toe (on testing plantar reflexes), as proving that an organic lesion existed, and thus excluding chorea, in which he believed the phenomenon in question had not been shown to exist. The utter inability to co-ordinate with retention of considerable muscular power he thought rendered the diagnosis practically certain though the complete retention of sensory power wanted some further explanation than was usually offered.

CASE OF RHINOSCLEROMA.

Shown by Dr. Dundas Grant.

Mrs. C., aged 26, came under my observation on July 14th, 1897, on account of complete obstruction of both nostrils; the tip of the nose was found to be hard and swollen, and the nostrils were completely blocked by a reddish growth of an almost fibrous consistency; there were fine symmetrical scales on the soft palate, and the uvula had completely disappeared. It was impossible to obtain a rhinoscopic view, but the finger introduced into the naso-pharynx enabled one to detect a firm dense bar extending horizontally across the lower margin of the posterior nares. A microscopic preparation of a portion of the tissue when removed was made by Mr. Wingrave, and Dr. St. George Reid made a cultivation which he considered answered to that typical of rhinoscleroma, as showing the capsuled bacillus.

The case disappeared from my view for about a year, but about six weeks ago she returned with the nostrils quite blocked; my previous treatment of scraping and dilating having had only a temporary effect. I managed to intro-

duce a fine tangle tent through the diminutive orifice, and then inserted a small pledget of cotton wool dipped in pure lactic acid.

BIRTH PALSY.

Case shown by Dr. J. H. Sequeira.

The patient, a male infant aged four months, was under his care at the North-Eastern Hospital for Children. The mother and father are quite healthy, and there is no history of syphilis. The patient is their first child. The labour was apparently an easy one, the mother being attended by a mid-wife. It was stated that it was born "head first," and so far as one could gather no undue efforts were necessary for delivery. Immediately after birth it was noticed that the child's fingers were bent into the palm and that the left elbow could not be straightened.

The present condition is as follows: the fingers of both hands are flexed into the palms, somewhat in the manner of a case of tetany. The left forearm is kept extended upon the arm and considerable force is necessary to bend the elbow. A similar but distinctly less marked extension of the right elbow is present. There is marked wasting of the shoulder muscles, particularly of the deltoid. This is more obvious on the left side, but is also present on the right. In all other respects the child is healthy. There is no paralysis or wasting of the muscles of the legs.

The electrical re-actions have not been taken owing to the necessity of an administration of an anæsthetic for their complete examination in so young a child.

The case is one of some difficulty, but it appears to resemble those described by Duchenne and Seligmuller. Here the paralysis was due to pressure on the arm or neck during delivery, either by the finger or the hook. The lesion is found also in one form of Erb's paralysis, and according to Ferrier and Yeo, would follow injury of the fifth and probably the sixth cervical nerve roots. The muscles paralysed by such an injury are the deltoid, the flexors of the elbow, the ex-

tensors of the wrist, and the long extensors of the fingers in particular. As a consequence of the unopposed action of the other muscles of the arm and forearm, a condition such as is presented in this case would result. A similar paralysis is seen in Erb's "upper-arm" type of infantile paralysis (anterior polio-myelitis). According to Gowers the prognosis in the obstetric cases is fairly good; most of them slowly recover.

CASE OF LUPUS ERYTHEMATOSUS.

Shown by Dr. J. H. Sequeira.

The patient, a young woman aged 21, had suffered from this disease for two years. The eruption began as two symmetrical patches just in front of each ear, and gradually spread on to the cheeks. Later a small area was noticed across the bridge of the nose. The symmetry of the patches was remarkable, but the malar region on each side was absolutely unaffected. There was slight superficial scarring, and the more recent parts of the eruption were of a somewhat livid red colour. The interest of the case lay in the fact that the disease had been diagnosed as syphilitic, and had been treated as such, of course without benefit. In its present condition it was characteristic of the erythematous variety of lupus erythematosus. The case had only recently been under Dr. Sequeira's observation, and treatment had not yet been begun.

Dr. W. H. Kelson showed a case of lupus of the nose, palate and tongue; Dr. Dundas Grant a case of syphilitic lesion of the facial, auditory and accessory nerves.

"TRAPS AND PITFALLS IN SPECIAL AND GENERAL PRACTICE."

Presidential Address by Dr. J. Dundas Grant.

GENTLEMEN,—In electing me as President of this Society you have conferred upon me an honour for which I cannot too heartily express my thanks, and one which I think is vastly above my deserts. Whether you have done a wise thing I very much question; and although the success of the Society's year does not depend entirely upon the personality of the President, it does so to such an extent that I feel very seriously the responsibility which you have laid upon me. Perhaps, however, you have realised that the duties of the President are such as I would take the greatest pride in performing, and that this very pride might lead me to make such efforts as would enable me to carry out with success the work which might have fallen into the hands of someone more capable, even if less enthusastic. A friend of mine who found himself honoured by being elected president of a literary and scientific society in Glasgow, took his duties so much to heart that during the whole interval between one meeting and the next he devoted himself to studying with the utmost thoroughness the subject of the paper to be read at the forthcoming meeting. This course of action resulted in serious deterioration of his health, but the increase in his scientific and literary information was such as to make him a perfect terror to his friends. I fear I cannot offer to sacrifice myself to the same extent that he did, but if I do not at the end of my year of office find my information on general and special subjects, whether in medicine or surgery, vastly greater than it is at present, I shall be indeed disappointed. My attendances at the Hunterian Society have always resulted in my learning something which I did not know before, and in view of the regular personal and official attention which it will be my duty and pleasure to give to every paper brought before the Society during the forthcoming year, it will be strange indeed if I am not entering upon one of the most valuable periods in my whole medical education. For this, Gentlemen, I have to thank you, as I do now, from the bottom of my heart, offering you only in return the assurance

that I shall do my utmost to promote the interests of the Society materially, socially, and scientifically, by every means in my power.

I do not wish to trespass too much upon my position, and to occupy an unfair amount of your attention for the somewhat wide subject on which I propose to dilate for a short half-hour, but the consideration of the fact that I have been a Fellow of this Society for more than twenty years—the chief reason, I presume, for your having elected me to its chair—emboldens me to believe that in that time I must have seen a good deal, both in general and special practice, to which the terms "traps and pit-falls" may be very genuinely applied.

Among these traps and pitfalls, some are slight, some serious, and they may be various in character, as they effect the individual in himself, in his business, financial, social, or professional relations.

In my Hunterian Society's oration I expressed the opinion that in the practice of medicine there was enough to bring out whatever was best in any individual, if he allowed it to do so, whether his bent was scientific, literary, humanitarian, business-like, or philosophic. It may, however, from its engrossing nature, have the effect of warping and cramping his nature, so that he may lose interest in everything connected with mental, physical, social, or even moral culture, and *degenerate into a mere drudge*. Though this is a comparatively minor derelict, it is one greatly to be deplored. Dr. Johnson in his dictionary described lexicographers as "writers of dictionaries, harmless drudges." Happy is the medical practitioner who, as a drudge, can say to himself, that he has been a harmless one.

The Business of Practice.

Though many members of the profession are careful to a degree in regard to *business matters*, a very large proportion are in this respect deplorably negligent. The mere rendering and recovering out-standing accounts may seem a trivial matter, and negligence in regard to this may be due to the greater interest taken by the practitioner in making himself a good workman and increasing his professional reputation, rather than in collecting his fees. To show how indulgence

with debtors may damage a reputation I will recall a genuine case of a patient who owed her doctor a bill and was afraid to call him in in case he should ask for it. What more natural than to summon another man, and when asked by neighbours why the medical attendant was changed, to attribut it to his carelessness, unskilfulness, or anything rather than the true cause? Again, the doctor's indulgence may lead to the patient "running-up" an account which it is quite out of his power to pay.

It is as important for the practitioner to save, as for any ordinary citizen, but in his case there are a few special reasons for his endeavouring to make himself independent of temptations to which the *res angustæ domi* may render him liable, such as the multiplying of visits and consultations or the performance of avoidable operations. What practitioner has not at some time or other had to refuse the liberal payment offered him for the removal of the fertilised ovum? I say, then, that the medical man who thinks it unworthy of him to take the steps necessary for securing his financial position allows himself to totter near most dangerous pitfalls.

I will only refer to the need of providing by insurance, investment, or otherwise, for times of professional depression, for accident, illness, and still more, for old age. I hold that a man should endeavour to retire from practice before practice retires from him, whether he be induced to postpone his retirement by financial necessity or by the mere love of his professional work. It is not uncommon to find elderly practitioners becoming disappointed, jealous, cantankerous, peevish, and even vituperative, who had formerly been open in manner, generous in judgment, and kindly in counsel.

Malingering.

As an instance of minor temptation I may narrate the case of a woman of about 50 years of age, who for twenty years was supposed never to have left her bed, having been brought to London from a distance under the influence of chloroform on account of some convulsive nervous disorder, presumably hysteria, simulating cerebro-spinal meningitis. During these twenty years she was believed to have taken no solid food and to have subsisted entirely on brandy and

water. She was, however, rather plump than otherwise, and there can be no doubt that she got up in the night and visited the kitchen larder. She was subject to well-marked epileptiform attacks in which neither touching the eyeball nor tickling the nasal mucous membrane produced any reflex re-action. A very striking feature in her physiognomy was the intense blackness beneath her eyes. Her chief complaint was the passage of a quantity of gravel which accumulated round the urinary meatus, and retention of urine. On account of this latter trouble she was visited every second day by a medical man who passed a catheter at each visit, and for years received on each quarter day the fees for these attendances. When the patient came under my care I had many searchings of heart as to how to deal with this strange combination of epilepsy, hysteria, and simulation, being doubtful how to steer between conscience, brutal downrightness, possible errors of judgment, and tactful self-interest. I suggested the remarkable resemblance between the urinary sediment and the sand in the bird's cage, and as a result the "gravel" disappeared. I withheld the use of the catheter, with the result that the patient's father insisted on my returning and relieving her from the agonising pain which my omission had caused. One day, however, I found the blackness under the eyes extending down the dorsum of the nose, and by means of a wet towel I removed the blackness completely. Thus convinced of the fraud she was practising, I felt I could convict her also, and assured her that if she would get up and put on some clothes, which we borrowed from a neighbour, I would say nothing as to her deception, and simply mention it as a remarkable recovery. So distasteful to her and her family was her return to a reasonable, natural mode of life that I got no thanks for what I had effected; I was simply informed that there was apparently no need for me to see the patient again, and I know that for subsequent illness in the house another medical man was called in my stead. How easy to exercise interested credulity and continue attendance in such a case as this.

Infection.

Exposure to infection and to inoculation with the virus or microbes of sepsis, tubercle, syphilis, or other diseases,

is so frequent that the medical man ought to be constantly on his guard, especially in the way of cleanliness and tidiness in his manipulations. He should be most cautious to avoid abrasions or other injuries to the skin of his hands, and above all he should forswear that objectionable but almost irresistible habit of holding instruments in his mouth. I am sure it has often led to specific inoculation on the lips or tonsils. Among the dangers besetting the medical practitioner on account of the peculiar circumstances in which he is necessarily placed is that of being charged with breaches of sexual propriety. Too great caution cannot be given to safeguard oneself by all possible means. That *medical scandals are so few* is eminently creditable to the profession.

To pass now to more purely *technical traps and pitfalls*, these beset the path of the general practitioner, consultant and specialist alike.

Specialism.

I have to plead guilty to being a specialist, but I regret that the term "specialism" has unfortunately acquired a somewhat evil reputation, which I venture to consider accidental, and by no means essential. The age is one of specialism. In the most ordinary manufactures, the work which is the most perfect of its kind is done by specialists. No man alone is expected to make a piano, a chair, or even a cushion, in its entirety; for I understand that it has been found that people who can sew buttons on cushions with the greatest rapidity and neatness and to the greatest economical advantage, are those who confine themselves to this particular speciality in the cushion manufacture. In our sports specialism is rampant; bowling, particularly if the artist has the advantage of being left-handed, is brought to the greatest perfection by those who devote themselves to this particular branch of cricket. In sum, it would be foolish to shut our eyes to the fact that continued and concentrated attention to one particular department of work is followed by a greater facility in its comprehension and application.

The late Sir William Savory, in whom "the taint of specialism," if it may so be called, was as thoroughly wanting as it is possible for it to be, expressed himself as follows:—

"Now with regard to what is called specialism, let me

say at once that I have no word to utter in disparagement of that form of it which consists in a man, first of all, studying and duly qualifying himself in the principles and practice of surgery as a whole, and then, at length, devoting his attention more especially to the cultivation of some particular part of it. This is not the form of specialism against which I would protest. In my humble opinion it is in no way an unworthy one, and if it were it is by no means frequent. It is no illustration of the law of division of labour as commonly understood, for excellence is not here obtained solely by exclusiveness. But the kind of specialism which should be denounced, and which it is to be feared is not very rare, is that which consists in the practice of some particular portion of surgery without adequate attainment in, or continued study of, surgery as a whole."

Sir William Gowers who, in his own department of neurology, is perhaps one of the most eminent and respected of specialists, has very properly drawn a *distinction between "specialism" and "exclusivism,"* the latter being in reality the form of specialism to which scientific exception may justly be taken.

Where elaboration in the machinery and manipulation necessary for making accurate observations demands a special amount of mental and mechanical dexterity, it is impossible for this to be within the reach of those who are not prepared to devote an amount of time to its acquisition, which the pure all-round practitioner would be unable to give; and it would be unfair to deny to him who has devoted that time the credit for the special capabilities which this devotion has enabled him to attain. While doing this, it is, however, impossible that his acquaintance with the other departments of the remedial art should be kept up to the same standard of perfection, and indeed, unless he is ever watchful these may and must diminish; indeed, the tendency is for his mental vision to become blurred so far as they are concerned, and he may almost be inclined to think that they do not exist because he has ceased to see them. It would indeed be an unhappy thing if sick humanity in its entirety were entrusted to specialists in whom this change had taken place; in every case they would most probably see either some ailment per-

taining to their own speciality or no ailment at all, and the possessor of a composite morbid organisation would wander wildly from one to another, and would suffer much at the hands of many physicians, including surgeons and specialists of every form.

I deny, however, that this decadence need take an extreme form, for I believe that on the contrary the continued and anxious cultivation of the powers of observation and manipulation in a particular direction as required in the practice of any semi-surgical specialty, leads to a sharpening of these faculties to some extent in every direction. Thus, the mischievous tendency to which I have referred may be considerably weakened.

The Debt of General Medicine to Specialism.

That *general medicine has benefited by the works of specialists*, some may be disinclined to accept, but few will venture to deny. To take as an instance the introduction of laryngoscopy; history compels me to admit that its conception did not take place in the brain of a throat specialist, for indeed in its present form it was brought before the Royal Society in 1854 by that eminent nonagenarian Manuel Garcia. He was, however, from our point of view, a specialist, though a non-medical one, for he devoted his life to the study of the production of the musical voice. Previous to this, however, there exist records* of which this Society may be proud, of a demonstration before it in 1829 by Dr. Benjamin Guy Babington, of a laryngoscope closely resembling the instrument now in general use, which, when introduced through the mouth enabled the observer to see the glottis and the movements of the vocal cords, illumination being effected by means of a hand mirror. The popularisation of the use of the laryngoscope in general medicine is, however, to be credited to the specialists among whom we have no greater name to record in this country than that of the late Sir Morrell Mackenzie. The laryngoscope is not the monopoly of specialists, but it will be readily admitted that it is to them that its wide use is chiefly due.

I need hardly remind you of the value of the laryngoscope in the detection of aneurisms and other growths in the in-

* "London Medical Gazette," 1829, Vol. III., p. 55.

terior of the thorax; it is less well-known that occasionally there occurs as one of the earliest signs of locomotor ataxy, paralysis of the muscles of one or other or both vocal cords. Asthma is another disease in the treatment of which general medicine owes much to the specialist, and every practitioner in diseases of the nose must have before his mind cases in which the treatment of the nasal cavity has resulted in long and even permanent relief from the suffering depending upon this disease. Sir Felix Semon has indeed said that only a small percentage of the large number of cases of asthma, which were at one time brought to him by physicians were traceable to nasal disease or relieved by nasal treatment. His experience, however, has been exceptional for a reason not far to seek. At the time when attention was first drawn to the dependence of asthma in a certain number of cases, at least, upon nasal disease, Sir Felix Semon already had in so high a degree the confidence of physicians at large, that cases of asthma were brought to him in large numbers, on the supposition that he was to find nasal disease in them all; he was naturally disappointed at the inevitable result in a considerable proportion of the cases. At the present time physicians make a rational search for nasal symptoms, and when such are present or suspected, then only are the patients brought before the notice of the rhinologist, and under such circumstances the percentage of beneficial results is by no means a contemptible one.

The study of ophthalmoscopy has in the same way contributed enormously to the powers of diagnosis of the practitioner of medicine, and I need only recall how the changes in the optic disc have led to the detection of cerebral tumours, now amenable to operation; how tubercle of the choroid may be observed, and how also the changes in the retina may indicate incipient disease of the kidney. Many cases of unexplainable failure of health and pyrexia are now rightly traced to a suppurative disease of the dental alveoli, and headaches not otherwise amenable to treatment have been relieved by the correction of errors of refraction; the adaptation of prismatic lenses, or the removal of hypertrophies of the middle turbinated bodies—results which general medicine cannot afford to despise,

The Debt of Specialism to General Medicine.

On the other hand, the *special branches have equally often benefited by advances in general medicine;* thus, to take an instance from the speciality with which I am most familiar, deafness and hoarseness have been traceable to the presence of myxœdema, and to have yielded to the internal administration of thyroid gland, as they could not have done had the general condition been overlooked. Gout and rheumatism often play havoc with the middle and internal ear, and their influence in the case would be overlooked were the evidences of the cachexia not sought for. One of the most intractable forms of disease producing deafness, namely, the so-called dry or sclerotic catarrh of the middle ear, depends upon an arthritic fixation of the stapes in the fenestra ovalis, and in many instances the evidences of rheumatoid arthritis, such as grating of the shoulder, temporo-maxillary or knee joins, with cold sweats of the extremities, occurring in pale, delicate young women, may indicate the nature of the affection long before the typical deformity of the joints has had time to show itself. Deafness becoming worse under local mechanical treatment of the ears is sometimes due to hysteria, whatever that mysterious disease may be, and the detection of such signs as comparative hemi-anæsthesia, diminution of pharyngeal reflex, increase of patellar tendon reflex, narrowing of the field of vision, may, apart from the grosser evidences of loss of voice or the typical hysterical fit, enable us to account for, and with more or less success to deal with, the condition on which the deafness depends.

The additions made to our knowledge of disease of the nervous system help the specialist materially, and I may cite the comparatively recently discovered disease of the spinal cord, syringomyelia, one of the long unknown causes of paralysis in the region of the pharynx and larynx.

A familiarity with the symptoms indicative of the menopause are essential to the specialist who would successfully deal with diseases of the throat, and instances are constantly coming under our notice of disturbances of sensation in the throat, which cause the patient the greatest distress and anxiety, but are due entirely to the nervous disturbance incident to this period of life.

Physical Examination and General Observation.

In special or consulting practice, the tendency is perhaps to depend too much upon physical diagnosis, whereas in general practice the opposite is the case. No doubt the diagnosis of the disease may be approached from either standpoint, and thus, in a most valuable work on physical diagnosis, we find pneumonia classed among those diseases of the chest in which there is dulness on percussion. There are, however, many features which strike the family doctor before he has arrived at this stage in the examination, and delirium, rapid breathing, impaired oxygenation, and pyrexia, may lead him to his diagnosis before he has attempted percussion or auscultation. The circumstances under which he works are more favourable to the investigation of rational rather than physical symptoms, in plain English, his patients have a great dislike to what they call being "pulled about." I remember in being introduced to various patients by my predecessor in practice, I was urged by him to avoid examining the heart of a certain elderly gentleman in whom this feeling was very strongly developed; but having come fresh from the hospital and keen in using the stethoscope, I felt that my duty towards the patient was not fulfilled unless I had investigated the heart. The result was as my sagacious introducer had anticipated, and the patient promptly sent for another doctor. This is an exaggerated instance, but the general principle is true, that the feelings of patients tend very strongly to discourage the use of the method of physical diagnosis on the part of general practitioners. On the other hand, I was once much galled by having omitted to make a physical examination in a patient suffering from what were simply the symptoms of dyspepsia; as my remedies afforded no relief, it was proposed that we should have the opinion of the late Dr. Stephen Ward; he at once detected a well-marked carcinomatous tumour of the stomach, and when I expressed my mortification at having overlooked it, he smiled, and said that as a young man no doubt I was keen with regard to physical diagnosis, indicating that older practitioners were much more indifferent.

It is unquestionable that far more errors have resulted from neglect of physical signs than from defective investigation of symptoms and the acquisition of sympathetic tact

in carrying out our physical examination is almost as indispensable as technical skill. The late Dr. West's work on Diseases of Children contains in its opening chapters one of the most instructive and inspiring lessons on this subject I have ever read.

I presume that it has fallen to the lot of all to make with me such mistakes as diagnosing lumbago instead of aneurism of the abdominal aorta, catarrh of the uterus instead of suppuration in the Fallopian tubes, hæmorrhoids instead of epithelioma of the rectum, and, as I have said before, dyspepsia instead of carcinoma of the stomach. Many instructive lessons have been given me by physicians whom, during my time as a general practitioner, I have called into consultation. Thus, a physician whose name was long associated with diseases of the stomach, came to investigate a case which appeared to be one of chronic disease of that organ. Somewhat to my surprise he included in his examination not merely the rectum but the uterus, and found a slight hardness of the cervix, to which at the time he did not think any great importance could be attributed, but which, nevertheless, required watching; the advisability of his careful examination was evidenced by the fact that within a year from that time the patient died with carcinoma of that organ.

Very early in my career I had considerable trouble with a case of what appeared to be a stricture of the œsophagus; the patient had great difficulty in swallowing, though this at times seemed to diminish; he wasted and suffered from distension of the abdomen, without actually any ascites. The late Sir Andrew Clark came in consultation, and in his presence I was able to push a large-sized œsophageal bougie into the stomach; he then proceeded to make a rectal examination, and thought he detected evidences of malignant disease in some portion of the intestine external to the rectum. My fear was that there was a stricture of the œsophagus, and that it was cancerous; there was a stricture, and no doubt there was cancer, but the stricture of the œsophagus was spasmodic, and the cancer was in one of the abdominal organs.

I remember a case presenting the symptoms of cancerous stricture of the œsophagus, which seemed a favourable one for gastrostomy, but Mr. Mayo Collier, on examining the

abdomen, found evidence of carcinoma of the liver, and was able to pass a bougie down the œsophagus, the case being, in fact, practically identical with the one above described.

These two cases indicate the importance of examining under an anæsthetic before pronouncing any obstruction in the œsophagus to be impermeable. Dr. Stephen Mackenzie has published several cases of this reflex spasm of the œsophagus associated with disease of the abdominal organs.

The following is an illustrative instance of a spasmodic affection simulating organic disease. An elderly medical gentleman complaining of pain and difficulty in swallowing came to me in great anxiety, thinking he was the subject of cancer of the œsophagus. Having been formerly inoculated with syphilis he had been treated by another surgeon for that disease, and the absence of benefit confirmed him in his opinion that his obstruction was malignant. Observing however, that he was almost edentulous, and knowing that the swallowing of imperfectly masticated food may occasion the most extreme spasm of the pharynx and œsophagus, I urged him to apply to the dentist for artificial teeth. In a fortnight he returned smiling with a complete set of masticators, and assured me that every troublesome symptom had disappeared.

I have experienced difficulty in the diagnosis between alcoholism and commencing phthisis, especially in women; the prodromal rashes in the various fevers also are very apt to mislead, as for instance, the scarlatiniform rash proceeding the eruption of small-pox. Effusion into the labyrinth is constantly mistaken for a bilious attack, and I am informed by ophthalmologists that the same is true of glaucoma.

I regret to say that I have mistaken renal dyspnœa for asthma, only discovering when too late for my remedies to be of avail, the real cause of suffering and danger.

Apical pneumonia may puzzle the most wary, and I remember a case which commenced like typhoid, the subsequent localisation of physical signs in the apex of the lung suggesting tuberculosis until the crisis rendered the diagnosis obvious to myself and to the consulting physician whom I had by this time called to my aid.

Consulting and General Practice.

This particular instance reminds me that the consultant has often a very great advantage over the family practitioner. Apart from the more leisurely and important nature of his investigation, there has often been time in the interval between his being summoned and his arriving, for changes to take place, which render the diagnosis easy; as, for instance, the sneezing or rash of measles explaining at once the convulsions which had been puzzling the family practitioner, the crisis in pneumonia, the discharge in suppurative inflammation of the middle ear. I was formerly very much struck by the ease with which I seemed to arrive at the diagnosis in cases of obscure disease in which my neighbours did me the honour of calling me in consultation, as contrasted with the difficulties I had in analysing my own cases. I came to the conclusion that a man called into consultation with his mind screwed up to the pitch of concentration in a particular case, seeing it for the first time when its features were fairly developed, was in a much more favourable position for diagnosing it than he who had watched its gradual development from the outset, when its seriousness was not yet pronounced. There is need, then, for the charitable, I may say honourable, consideration on the part of the consultant towards the practitioner placed at such a comparative disadvantage. On the other hand, the ablest consultant is sometimes called in for a single examination of a case at a time when its nature is too obscure to allow of an absolute diagnosis; the family practitioner may at a later date witness the changes which may reveal its character and form an unfair opinion as to the judgment of his colleague.

The Value of Drugs.

The general practitioner has been charged with over-enthusiasm with regard to the value of drugs; the consultant, on the other hand, is credited with an equal tendency to scepticism. Either attitude is to be deplored, and I am convinced that the former is less regrettable than the latter. I postulate, however, the careful study of pharmacology with which the spirit of scepticism is absolutely incompatible. Making all allowances for individual idiosyncrasies, admitting

further, that much drugging that is practised is valuable on account of the "suggestion" which it conveys, I am convinced that the relief afforded to sufferers by practitioners who believe in drugs is far too great for any theoretical uncertainty as to the mode of action, to justify that relegation of them to the realms of all things vain, which some superior persons seem to countenance. Scepticism diminishes, and even disappears when the due selection of drugs is carefully studied. That too much is expected of them by many practitioners is undeniable, and in point of fact, it is very easy to become over enthusiastic about any particular drug or method of treatment, as the history of such drugs as aconite, phosphorus, and arsenic amply show.

Venesection.

Venesection is a method of treatment which has suffered both from neglect and from over-estimation. On one occasion I was attending a little girl through an attack of scarlet fever ending in acute nephritis, uræmic convulsions and coma. I proposed venesection, and met with protests and the suggestion that a more experienced neighbour should be called into consultation. The result of the consultation was the advice on my friend's part that I should leave the venesection alone; that the child was going to die, and that if I did the operation the death would be attributed to it. In spite of this, the parents being convinced that nothing could save the child, I got permission to do as I wished. The heart-beats, which had become almost imperceptible, became steadily stronger as the blood flowed from the vein; the patient recovered, and was alive and hearty many years afterwards. In a case of congestion of the lungs with distended veins following immersion and re-animation by means of artificial respiration, unconsciousness was rapidly developing. I practised venesection, consciousness returned and a rapid recovery took place without the occurrence of pneumonia. The next and I believe the last occasion on which I performed venesection was soon after the last mentioned one, when a patient suffering from dyspnœa, rapid breathing and cough, seemed to me to be likely to be benefited by withdrawal of blood. The case, however, turned out to be one of pulmonary tuberculosis, and the result of the loss of blood

was to promote euthanasia at an earlier period than otherwise would have taken place. Regrettable as was the result in the last instance, I can recall no more brilliant recoveries from impending death than the two previous ones; and what I have said of venesection is, I am sure, true of many other of our remedial agents, if we had the determination to employ them judiciously.

Pitfalls in General Practice.

In looking back on the ten years of busy general practice which extended from 1877 to 1888, I almost shudder to think of the pitfalls which by luck I have escaped. What became of the cases of appendicitis which ought to have occurred and died? Why had I no deaths due to extra-uterine fœtation? May I say with Dr. Johnson, that it was simple ignorance? I do not think so. I never had occasion to break up the fetal head, and though I am not aware what the experience of others may be, I believe that by the timely practice of turning, followed by the application of forceps to the after-coming head, I have succeeded in delivering in what would otherwise have been cases of craniotomy.

In my intercourse as a general practitioner with consultants I was often favourably impressed by those who, as physicians, strove to guard themselves from falling into surgical errors, and those who, as surgeons, gave due attention to the medical aspects of the case. In this way alone, it seemed to me, was the chance of error reduced to the minimum. I hold that while the general practitioner should emulate the exactness of the consultant, the latter should at the same time try to look at the case from the point of view of the general practitioner. The former may be a scientist or artist in his particular line, but the latter is the typical healer of the sick, whose livelihood depends upon his affording cure, relief or consolation, an ideal which should be foremost in the mind of whoever would succeed in the practice of the healing art.

In the light of what I have just said, you will, I am sure, agree with me that the traps into which both general and special practitioners are likely to fall are many and various,—the former for want of "special" knowledge, and the latter for want of general regard to medical considera-

tions. I shall quote in particular specially those cases which have come under my own observation; and I shall in the first instance narrate a few instances of errors into which practitioners of general medicine might readily fall for want of special knowledge.

The following is a concrete example:—A young woman with many signs of phthisis—cough, expectoration, disturbance of digestion, loss of appetite and general wasting—was sent to Bournemouth for treatment of her supposed pulmonary tuberculosis. My friend, Dr. Davison, was unable to detect the physical signs in the chest required to complete this diagnosis, but he discovered a purulent nasal discharge associated with the presence of multiple polypi of small size. He directed the patient to return to London and place herself under my care. I was able to restore the nose to a reasonably normal condition, with the result that all the phthisical symptoms disappeared, and Dr. Davison's opinion was absolutely confirmed. Similar cases have been observed in which the primary disease was suppuration in one or more of the sinuses of the nose, producing the *quasi* phthisical condition to which French writers have given the name of "pseudophymie."

Nothing is more terrifying to specialists in laryngology than the comparative indifference with which a persistent hoarseness is viewed by many general practitioners, the specialists well knowing that this is often the only symptom present at the early and tractable stage of epithelioma of the vocal cords. The practitioner is too apt to be biassed by the absence of pain and of the "cancerous cachexia," a fetish to which too many lives have been sacrificed. How often too, has an aneurism of the aorta been overlooked, when an examination with the laryngoscope would have rendered the diagnosis plain.

Pitfalls in Special Practice.

There are, however, traps of the most insidious description into which specialists are apt to fall, either from want of general knowledge or from the self-sufficient disregard for general medical considerations. I may quote a case of dryness of the throat, such as a specialist is very apt to attribute to nasal obstruction, and in which on the first visit I entirely

overlooked the real cause, whereas on the second one, I luckily made an examination of the urine and found ample evidence of diabetis mellitus. Habitual epistaxis, again, is in most instances to be treated by a localised cauterization of the so-called "seat of election" on the antero-inferior portion of the nasal septum, but the specialist who fails to examine the urine for albumin, is sure to be led into error at some time or another.

Perhaps the most dangerous trap of all is in relation to the question of hæmoptysis. There is no doubt that cases have occurred in which the hæmoptysis has arisen from rupture of a small vein in the pharynx, or it may be at the root of the tongue, and the knowledge of these few cases has too often raised hope immortal in the human breast that a visit to the throat specialist might result in the discovery of some such comparatively trivial cause for the dreaded symptom. I, as well as others, have fallen into this trap, and have had the mortification of seeing a patient return with unmistakeable evidences of phthisis, for whose hæmoptysis I had too cleverly cauterised some suspicious venules; I am quite convinced that the very last thing one ought to expect to find as a cause of hæmoptysis is such a local hæmorrhage as I have mentioned. It is most exceptional for this to arise from any other cause than incipient pulmonary tuberculosis. A medical friend brought his son to me on account of hæmoptysis, full of hope that I should find a cause for it in the upper part of the throat. With great distrust I carefully examined the throat and discovered nothing accountable for the bleeding, but on examination of the chest I was able to find, as I expected, sufficient evidence of tubercular disease of the right apex to lead me to refer my friend to a physician more skilled in diseases of the chest than myself. On another occasion a medical friend brought a cousin who had had a distinct hæmoptysis some two days before; history again repeated itself. The throat revealed no lesion, but I heard unmistakeable crepitation at the right apex. I advised an examination of the morning sputum and a consultation with a more skilled physician. Two days later the crepitations had entirely disappeared and the physician found absolutely no signs of disease of the lung, but

the sputum contained bacilli, and the patient has since had two break-downs, requiring repeated sojourns at Davos Platz. I may say in passing that mistakes sometimes result from omission to auscultate behind (over the apex of the inferior lobe) as well as in front.

Another trap was a case of considerable interest. A gentleman of advanced middle age had returned from India, and was advised to consult me on account of what was supposed to be tuberculosis of the larynx, the most marked symptoms being cough, hoarseness and wasting. On laryngoscopic examination there was a slight congestion of the vocal cords, but absolutely nothing characteristic of laryngeal phthisis. The patient was indeed considerably emaciated, but there was a yellowish tinge of the conjunctivæ, which suggested hepatic trouble. On inquiry I elicited that he was subject to shivering attacks every afternoon, and I ventured to make a diagnosis of tropical abscess of the liver, a diagnosis which was subsequently confirmed.

I may quote a case to illustrate the subject of myxœdema to which I have already referred, namely, that of a middle-aged woman who was sent from the Midlands to consult me some years ago on account of deafness. Her voice was somewhat monotonous, and there was just sufficient characteristic peculiarity in the physiognomy to enable one who was familiar with myxœdema to recognise it. I, therefore, wrote to her medical attendant advising that the patient should consume thyroid glands of sheep. Within three days I received a telegram to say that the patient was apparently dying, hardly breathing, with the pulse so soft and quick that it could not be counted. In the interval I had made myself acquainted with information concerning the physiological action of thyroid glands, and telegraphed at once instructions to stop the thyroid glands and to administer digitalis and ammonia. A letter arrived to say that although the patient had been so seriously ill, the hearing had quite recovered, and at the present time, thanks to the more discreet ingestion of the thyroid gland, she is in the best of health.

Some considerations with regard to enlargement of the thyroid gland ought to be at the disposal of those who treat diseases of the throat, and I have been saved from error

by the recollection of certain cases observed during my period of practice in the East End of London, at the time when it was more customary for the wives and families of seafaring men to live there, before the railway afforded the present facilities for domicile at a greater distance from the docks. In several instances under my observation the wives of sailors came to me on account of enlargement of the thyroid gland, which diminished under the internal administration of those valuable sexual sedatives, potassium bromide, and camphor, and disappeared entirely soon after the return of the husband. Recently a married lady of robust full-blooded type, was brought to me on account of an enlargement of the thyroid gland. I was able on close inquiry to elicit that, from motives of economy, in spite of strong mutual attachment, marital relations had for a considerable time been allowed to lapse completely and the origin of the thyroid enlargement was thus explained.

This illustration of the bearing of general medical observation on special practice reminds me of a form of deafness which merits your attention. Mr. Jonathan Hutchinson has described the amblyopia of young husbands, and I have in several cases observed the analogous occurrence of a marked degree of nerve-deafness in men similarly circumstanced. Excess, for the individual, in solitary indulgence, is a frequent cause of nerve-deafness in males, as direct interrogation and the results of reform clearly prove. In the female the same cause no doubt constantly prevails, but I am not aware of any means of detecting the existence of the injurious habits which are not open to objection.

A curious instance of a trap for the specialist was the case of a male child of about ten months old, brought to me on account of attacks of suffocation attributed to some obstruction in the throat. On inquiry I elicited that the attacks were characterised by evidences of intense nervous excitement, culminating in a climax followed by intense depression approaching collapse. This closely answered to the description of the orgasm given in Braun's work on diseases of children, under the heading of infantile masturbation, that I ventured to diagnose it as such, the father confirming my opinion by the observation that during the attacks there was obvious pria-

pism. I found an elongated and tight prepuce, and recommended circumcision with, as I afterwards heard, the most satisfactory result.

Specialism and Medical Education.

It has been proposed to include examination in the so-called special subjects among the requirements for medical qualification, and there can be no doubt as to the correctness of this position, as I think some of the incidents which I have narrated amply prove. This will not, however, make every legally qualified practitioner a specialist in one or every subject, but it will do for the public more than the creation of any number of specialists, if it raises the standard of medical education all round. The bane of specialism is self-sufficiency, and the general practitioner also is sometimes not altogether free from this defect, but with increased education in the direction that I have just indicated he will exercise a wholesome check upon the specialist, who will find that he is no longer dealing with an ignorant person to whom he may lay down the law at his own sweet will, but with a well-equipped colleague who, if he is not so accurately informed in regard to the one special portion of the human organisation, is as well, or probably better, acquainted with its generally workings, and able to take a wider grasp of the situation than the pure specialist may be able to do. I am confident that humanity has suffered from the arrogation of special knowledge of a limited department of medical science, on the assumption that the general practitioner is proportionately ignorant. With increased education on the part of general practitioners, and more active competition among specialists, this evil has been minimised, and to a great extent eradicated; that it may be completely so is a consummation devoutly to be desired both for the sake of sufferers, the credit of the profession, and the self-respect of all practitioners, both general and special.

Gentlemen, if I have seemed to give instances in which I have escaped falling into traps, I have given them because I feel that my escape was a very narrow one, and I trust the cases are illustrative and instructive. Were I to give you a detailed list of the traps into which I know I have fallen, I should occupy a much longer space of time than I am

justified in doing, and I doubt not that for every trap I have escaped I have fallen into a dozen. I can only hope that those who have suffered by my ignorance may not bear too large a proportion, as compared with those who have benefited by my experience of the traps and pit-falls into which I have fallen, as well as those from which I have only by luck escaped. Until the human knowledge approximates to the divine we must expect to make mistakes. If the specialist keeps his mind open for the instruction which he may derive from the general practitioner, the list of mistakes will be all the fewer, and those which are committed all the more excusable.

Dr. Herman said there was a clear case of amenorrhœa that no doubt was familiar to many. They were girls generally of from 15 to 17. They were fat, their faces red, mucous membranes florid, features slightly puffy, hands and feet cold and bluish; they complained of headache and backache, often of drowsiness, and were costive. He had found such cases greatly benefited by thyroid extract.

Dr. Glover Lyon asked the Fellows if they had ever seen a case of specific renal dyspnœa, renal asthma; he had never seen one. He thought that when dyspnœa became a prominent feature in a renal case it was due to an increase in severity of the case generally or to cardiac failure.

Dr. M. Bernstein, referring to hæmoptysis, said that the region of the throat may be the seat of predilection for bleeding other than phthisical, and related a case of copious loss of blood from the throat in a strongly built man—by trade a tobacco cutter—that had been taken to be tubercular. The roof of the tongue and adjoining regions had a glossy anæmic and somewhat atrophic appearance, and the thin blue veins were prominently visible. But in the absence of pathological signs in the chest and elsewhere he abstained from any local treatment, and proceeded to treat it as a case of vicarious hæmorrhoidal bleeding, using Hungarian waters with marked success. The hæmoptysis ceased, the man resumed his heavy work, and four years later he began to bleed from piles.

Dr. Harris Best said: A few weeks back the following case occurred in my practice. At first sight the case seems so simple that it might be thought an apology is needed for mentioning it, but for the fact that the patient nearly died at the time, and a junior member of the profession who was helping me at the time unfortunately fell into the pit which, more by luck, I happened to escape.

A patient with (?) malignant disease of liver was said to be suffering from hæmatemesis, which ice, etc., failed to check. At my friend's suggestion I called in to see the case. A big receptacle was before the patient, which contained a pint of blood, or perhaps rather more. Every minute or two he appeared to bring up a small mouthful; I noticed he did not vomit it up. A few weeks previously I had been with him to the dentist's, which my friend did not know. On suggesting that the blood came from the gums the patient scoffed at the idea. However, careful examination made it probable, and on plugging the gums it immediately stopped, and not another drop was lost. The patient was out and about again in a few days.

Dr. Sequeira referred to the common error of mistaking the cough, particularly in children, due to tonsillar and naso-pharyngeal disease for that of bronchitis. He mentioned also a very interesting case of amaurosis occurring in a young man, which was at first believed to be due to tobacco, but which an examination of the urine proved to be the first symptom of renal disease. The patient, under careful treatment, recovered completely. He also described a case in which meningitis was supposed to have followed broncho-pneumonia. The symptoms, however, were found to be due to the administration of strychnine. A complete recovery followed the stopping of the drug and the administration of bromide of potassium.

Dr. Rawes related the case of a youth aged about twenty, who had suffered from constant headache with acute exacerbations for some months. He had had two or three attacks of vomiting. He also complained of giddiness, and had a slight tendency to reel in his gait. Examination of the fundi showed slight cloudiness and doubtful swelling of the optic disc. He had about four degrees of hyperpetropia in both eyes, was astigmatic, and had always worn spectacles. The muscles on the left side of the face did not act so well as those on the right. He was taken into hospital and treated for a time for cerebral disease. No alteration took place in his condition. His refraction was then thoroughly tested, when it was found that the errors had not been properly corrected. This done, the headache and giddiness completely disappeared. The apparent weakness of the facial muscles was explained by the fact—not known at the time—that he had formerly been apprenticed to a watchmaker, and had always used the watchmaker's glass in the right eye, thus causing the muscles on that side to "overact."

Remarks by Mr. A. W. Galloway:

Case I. *Case of erysipelas simulating hydrophobia.*—I.W., pot-boy at a public house, irritated a large Newfoundland dog, which caught him under the left arm and tore him badly. Sent to St. Bar-

tholomew's Hospital, where the wound was dressed. Case went on quietly till 10th day. When I was called in the lad had many symptoms resembling hydrophobia—difficulty in deglutition, opisthotonos, hoarse barking sound in breathing, snatching at bystanders with a view to bite them, etc. Temperature could not be taken on account of violence of patient. Symptoms not yielding to treatment Dr. Mackenzie was called in consultation. My opinion was that it was not hydrophobia, but that something was developing of a different nature. I learned that the lad had been in conversation with a police constable, whose brother had had hydrophobia, and who detailed the case in glowing colours to the lad. After this the patient went out and stood on London Bridge to see a vessel clear out, a biting east wind blowing upon him all the time. On examining the coat the boy had on when bitten, I found the dog's teeth had not punctured the sleeve, and therefore had not touched the flesh, but merely torn the flesh of the arm through the coat. Dr. Mackenzie agreed with my opinion, and endorsed my treatment, and said probably the next day would reveal some condition which might prove to be erysipelas. Erysipelas developed fully on the next day. One reason for doubting the occurrence of hydrophobia was due to the insufficient time for its development.

Case II. *Case of masturbation simulating epileptiform convulsions.*—I.S., a young woman aged 17, was brought under my notice as suffering from "fits."

Menstruation normal. The attacks, I learned, were chiefly during the night, and generally a little after going to bed. I treated the case for a time as epileptiform convulsions, though I could make out no history, either family or otherwise, that would confirm such a diagnosis. I thereupon took the mother into my confidence, and suggested the possibility of masturbation, and asked as to the position of the patient and night-dress, etc., when the attacks occurred. The mother was very indignant, but I persuaded her to watch the patient, unknown to her, when she went to bed. My suspicions were confirmed, and the patient made a good recovery. Doubtless these cases of masturbation are more common than is generally supposed, and it would be a great advantage if symptoms could be formulated in order to assist in diagnosis.

Dr. W. H. Kelson said that he thought traps and pitfalls often arose from taking a too one-sided view of cases, and related an instance in which doctors and students had ascribed to all kinds of nervous diseases the effect in gait due to an artificial limb,

Sir Hugh Beevor and Mr. John Adams also made some remarks.

The President, in reply, suggested that the accidental poisoning with strychnine was sometimes due to the use of chloric ether added to the mixture instead of chloroform water. There was then apt to be a precipitated drop of chloroform at the bottom of the bottle which extracted the alkaloid, and the whole of the strychnine in the mixture was then given with the last dose.

He was surprised that the Fellows had not narrated instances of malingering, and he called to mind the case of a young girl with a collection of "cheesy matter" in the ear, which turned out to be actual *cheese*. Another instance was that of a girl on whom the radical mastoid operation had been performed, and unfortunately she developed erysipelas; she received the greatest care and sympathy. Soon afterwards she returned to the hospital, the wound having broken down and the discharge returned. On this occasion she had again an attack of erysipelas, and during the after treatment small fragments of bone protruded from the orifice of the wound and had to be extracted. This recurred so regularly that he (the President) suspected malingering. The patient was taken into hospital, and the matron found among her belongings a paper parcel containing a mutton-bone broken up into small fragments, such as had been found in the mastoid wound. She had manipulated the wound with her fingers, which she pushed up under the dressings, and in this way prevented the normal healing action.

He recommended camphor as a sexual sedative, and ordered it in the form of a strong tincture to be administered in milk. When given in other ways it was apt to be precipitated into the stomach and to act as an irritant poison.

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